

AMERICAN NURSERYMAN

The Nurseryman's Forte: To Make America More Beautiful and Fruitful

FEBRUARY 15, 1938



Fothergilla Monticola

How to Prolong the Selling Season
New Desirable Herbaceous Perennials
Identifying the Lindens
Androsaces of Easy Culture

AMERICAN NURSERYMAN

Chief Exponent of the Nursery Trade

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FEDERAL LICENSING ACT.

Lately the daily newspapers have been giving more space to a piece of legislation called to trade attention by members of the A. A. N. executive committee several weeks ago. This is the corporation licensing act, Senate bill 3072, introduced by Senators Borah and O'Mahoney.

Each year there have been introduced in Congress similar proposals, to remedy the wide variation in incorporation laws in the various states. But the matter has assumed no importance.

The bill mentioned above is particularly conspicuous for the various regulatory measures introduced as a phase of corporation licensing. Wages, hours and working conditions, trade practices and labor relations and other aspects of business may be regulated under this act. While primarily directed to enterprises engaged in interstate commerce, it also is extended to those in competition with such enterprises, so that virtually every corporation is included, except a few specifically excluded, chiefly those subject to regulatory commissions already.

The act is made applicable to private enterprises as well as corporations by the definition of a "corporation" as including "any body corporate, association, trust, joint stock company, limited partnership, syndicate, group, pool, joint venture, or other unincorporated venture." So the revocation of a license would practically amount to exclusion from business.

The Mirror of the Trade

Once the bill were passed, other aspects of business could be brought under regulation by subsequent additions to the list of conditions attaching to federal licenses. While most observers believe the measure will not pass Congress in its present form, there are fears that the proposal might slip through as a means of accomplishing the elimination of child labor and regulation of wages and hours. Because of that fact, general opposition is growing to this measure, whose objectionable possibilities seem almost unlimited.

AT THE CONVENTIONS.

Reports of state meetings in last month's and this month's issues indicate larger attendance than for several years and in many instances a notable addition to membership.

Several factors are responsible, including improved business the past year and better convention programs in some cases, but probably the most important has been a vital realization by nurserymen that the government activities and other outside influences which affect their business are beyond the power of the individual to oppose or direct. This has been particularly brought home by the activities of the American Association of Nurserymen in the past year and the general trade attention which they have received, particularly with regard to the social security taxes.

The gain in convention attendance and in membership is gratifying to the officers of the various associations, but they realize at the same time the numbers yet have not reached a majority of those in the nursery business in the respective areas. Inasmuch as the reports in these columns indicate the value and effectiveness of each organization, it is to be hoped that the gains will be extended, so that the numbers recorded a year hence will show still greater growth.

EXPERIENCING mild winter weather in most sections of the country, nurserymen are looking forward to an early spring and making preparations accordingly.

FOTHERGILLA MONTICOLA.

Perhaps the lack of an attractive or colorful name has retarded the popularity that the delightful fothergillas deserve. Certainly there appears to be no reason from an amateur gardener's standpoint why they should not be more widely taken up, but their slow growth and some propagation difficulties may have deterred nurserymen from growing them. Also, the fact that they are native to the southern Allegheny mountain region likely has made northern growers shy from them on the presumption that the shrubs would not be hardy. Strangely enough, the fothergillas appear to be dependable far north of their native habitat, as they have gone unharmed through temperatures as low as 30 degrees below zero.

Springscent has been suggested as a common name for the fothergilla, and this name has been given some publicity in publications of both the Arnold Arboretum and Morton Arboretum. That the public will take to the shrub regardless of what it is called has been forcibly demonstrated every time it has been displayed at the spring flower show in Chicago by the Morton Arboretum under the botanical name. Dwarf alder is another suggested common name.

All of the foregoing common names have been applied to *Fothergilla major*, the species that is most generally seen. Alabama *fothergilla* is used to designate *F. monticola* in the catalogue of the one firm in this country known to be offering this species, which is illustrated on the front cover. This is an appropriate common name in that the natural range of *monticola* is North Carolina to Alabama, whereas *major* is largely found growing in Georgia. As a matter of fact, there appears to be some doubt as to whether these are distinct species, many botanists considering *monticola* to be merely a variety of *major*.

The chief differences are that *monticola* is slightly lower growing and of more spreading habit and generally has slightly larger clusters of flowers, one and a half to four inches

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The Chief Exponent of the American Nursery Trade

*The Nurseryman's Forte:
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FEBRUARY 15, 1938

No. 4

How to Prolong the Selling Season

*Garden of Plants in Containers Ready to Transplant Described
at New Jersey Meeting by Fritz Hendrickx, of Bobbink & Atkins*

To some of you it may sound ridiculous to hear some one discuss the subject how to prolong the selling season, knowing that thus far we have been crowding everything possible into our spring and fall seasons, seasons which overlap to the extent that there is hardly a period between stop and go—a period which we all feel we should have in which to relax completely, to sit back and calmly and intelligently review our various activities of the past season and to work out an improved schedule for the next open season, a schedule mainly based on less waste of effort and material and more efficiency for all of our operations.

Personally, I am convinced that more can be accomplished by improving the efficiency at the height of our seasons, when our expenses have reached a peak, than in scheming how to prolong a partly inefficient season. This is where I think most of us fall down and take our biggest beating, mainly due to the fact that our operations are mechanized only to a small percentage, thus opening the way to considerable waste, which could be turned into a handsome margin of profit by proper planning.

All I have mentioned so far is beside the point of how to prolong the selling season, but you know that it is unwise and unprofitable to pyramid on inefficient operations. If we start wrong, everything we do from there on is wrong. It is essential that we have a sound and solid foundation to build on—consisting of a clear, not too intricate, plan, and then and only then, when we have reached high efficiency, should

those who wish to give further thought to how to prolong the selling season.

I know all of you have a hobby of some sort, to which in the past you have hardly had any time to devote, and if you did leave your business child, you felt guilty and conscience-stricken, sneaking out with fly pole, gun or golf sticks, flattering yourself for getting away unnoticed, only to have your office boy catch up with you to say, "Boss, as long as you are going fishing, can I get off as my grandmother—?"

Personally, I love to think back twenty years, when our plantings in and out of nursery wound up June 1, and orders from then on were booked for fall. Nowadays, we are all too greedy in trying to do everything imaginable ourselves, at anytime during the year, instead of being big enough to let some of our competitors, who specialize in certain work, handle that work for us and in so doing create good will and make friends, instead of deadly competition. If, for instance, we are not equipped for moving large trees, we cannot do it profitably; so go to a specialist. The same holds true in making lawns, building roads, etc. This is the age of specializing—let us more and more become specialists in growing only items we can grow well, and only do work we can do well, not begrudging our friends in business their just share.

Now to those of you whom I have not been able to discourage and who insist on prolonging their selling season, I offer the following suggestions:

We now wish to sell and plant

late, and at a time when successful transplanting of stock no longer dormant becomes more and more a hit-or-miss affair. We cannot afford to take such chances and the only way to solve this problem is to have plants that have been specially prepared for such late planting. Have plants available in clay or tar-paper pots, tubs, wire baskets or any other containers, which will transplant with perfect safety at any time. Such stock can be obtained from your fellow nurseryman. While some of us have practiced this idea, I am certain that the possibilities of this field have hardly been reached.

As a step in the right direction, I suggest a special show garden, containing only such stock as has been grown in pots, tubs, etc., instead of having just a heeling-in ground, as in the past, where all sorts of plants were heeled at random. Plant this special garden with potted plants only, plunged in peat.

I have made up a specially prepared plan, worked out as a show garden, showing an arrangement of pot plants to aid in prolonging the selling season. This garden can, of course, be altered to suit individual needs, and the idea of it is to show visitors and prospective buyers just how such plants should be used in the home garden. Varieties of plants which take two or more years to mature or show character must be represented by at least one matured plant, in front of which the younger potted ones are plunged.

You will have the great advantage of conveying to your prospective buyer, from the time he enters your

show garden, the idea that, for instance, plants along a stone wall are such as will climb or cling; therefore, one side of the garden should consist of a wall of natural stone, and perhaps against this wall one or two trained fruit trees in tubs could be shown. Another section of this wall could show perennials, etc., adaptable to dry walls.

Other sections of beds in the garden should feature ground covers, keeping the evergreen from the deciduous ones; plants suitable for accent points, such as standard roses, standard lantanas, etc.; plants suitable for planting between flagstones; plants suitable for trellis, pergolas, etc.; plants suitable for edging and bordering; flowering shrubs, and annuals.

Another section might show perennials, of which a good many could be carried in 4 or 5-inch pots, for clients to use to replace others that have finished blooming. This would be a great help to owners of gardens of limited space.

Provide for a neat shelter with

chairs and table. Have there photographs of gardens, showing where and how stock as heeled in has been and can be used.

Label plants neatly and be sure to have a clearly prepared list of items in the garden, with prices. Be sure to have the items on this list numbered, corresponding with numbers in the garden, so that visitors may readily locate whatever they are interested in.

Flowering plants, not in bloom at the time the prospective buyers call, should be supplemented with photographs or color plates of such plants in bloom, stating time of flowering.

Give this garden ample publicity in your local papers, catalogues or other literature you may issue.

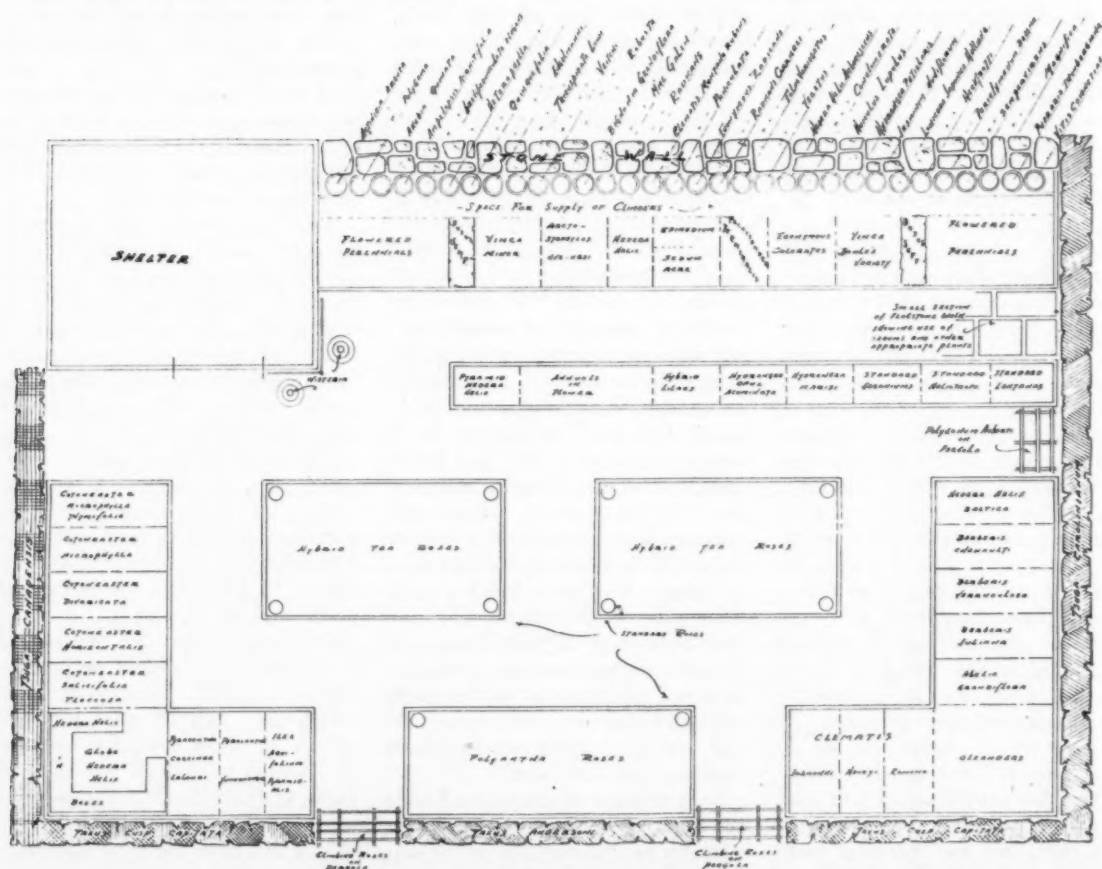
To make it unnecessary to keep too much help in your sales garden throughout the week, mention specific days in your advertising, stating now is the time to plant such-and-such. Urge customers to carry what they buy, avoiding the expense of delivering small items at great distance.

The average plant lover is not so busy in his garden in late spring or early summer and will come to your grounds much more readily than in the height of the season.

Provide for ready, neat containers, into which plants sold can be slipped without delay.

Once they are on your grounds, take advantage of taking visitors through your general nursery, preparing the way for future orders. We all realize we must have a drawing card or a magnet to bring people to visit us. Once they are in the nursery, sales are almost certain, and this garden will be such a drawing card; so take full advantage of it.

In closing, I wish to state that if you will give this garden proper thought and create one on your grounds to suit your needs, your fishing, golfing or sporting days will be considerably crimped — unless you happen to be of the care-free, happy-go-lucky type, who will let your partner do the worrying and just show up once a week to rifle the cash register.



Plan of Show Garden Containing Plants in Pots Ready for Sale to Prolong Season.

New Desirable Herbaceous Perennials

Better Varieties of Hardy Plants Recommended at Ohio Short Course for Nurserymen by Eugene S. Boerner, Research Head of Jackson & Perkins Co.

The perennial border, one of the first things to deteriorate in the home garden, unlike shrubs, must be replaced or replanted, and when your client or customer calls on you to do that, make it your business to offer as replacement the better newer varieties. Use *Rudbeckia The King* instead of plain dirty-looking *Rudbeckia purpurea*. Use *Veronica Blue Spire* instead of *V. spicata*. Use the new white *Liatris scariosa alba*, and use the new *chrysanthemums*. If your customer is a garden club member, it will give you added prestige and a name for having the modern plants. If your customers are not garden fans, it will help make them such by giving them the best varieties and the best effect for the space used in the garden. Form the habit of labeling your perennials in their borders. This makes your customers plant-minded and keeps them interested. An interested customer is a steady customer, and that builds up your business.

Here is a partial list of the better perennials offered this year.

Anthemis Moonlight, a new softer yellow, is taking its place with the orange, sprawly *Sancta Johannis* and the real favorite, *Perry's* variety.

The asters are a field now being more actively explored, and the next few years may offer many fine new things. The latest developments are showing extra-large flowers and more disease-resistance. In the dwarfs, which were the vogue recently, I like *Bluebird*, *Lilac Time*, *Snow Sprite* and *Countess of Dudley*, or *Constance*. Among the 12-inch dwarf varieties, I like *Marjorie*, *Victor* and *Niobe*.

The taller fall asters are my favorites, however, and I have liked *Amethyst*, *Colonel Durham*, purple; *Silver Sheen*, blue; *Mount Everest*, white; *Charles Wilson*, red, and *Pink Nymph*. Some of the old favorites are still popular, but the newer ones are gaining on them. I hope we shall all be using them more, for they have a real place in the autumn garden.

Golden Giant is the first of a new strain of large-flowered, semidouble fragrant *coreopsis*. It is good, comes

true from seed and will soon be followed by others, including even flowers with full-crested centers.

Delphiniums are receiving a great deal of attention, and this year we have a full quota of the giant Pacific strain. This strain has a wide range of colors, with fine large flowers, and is being generally tested. It will find many friends next summer, and some probably may not be able to have absolute success with them.

There are, of course, the standard *delphinium* strains, such as the *Leonian* strain, the various *Vanderbilt* strains and others. There are also new ones in the offing, built for particular hardiness, which are embodying many of the features now available with the ruggedness so much sought in the colder regions. The new *Ruysii* strain and the first variety of it, *Pink Sensation*, will be available next fall and spring. The latter is like *Belladonna* in form and growth and is continuously in flower even as late as mid-November.

Geums have been passed by too frequently because of their semi-hardiness, but the new pair, *Princess Van Orange* and *Fire Opal*, have withstood 30 degrees below zero with us. They have interesting flower value and excellent foliage value and should be used.

Gypsophila Bristol Fairy is still my favorite, but *Rosy Veil*, the low pink double form, has a definite place in every garden.

Gypsophila Bodgeri, the intermediary form, is also double, but does not have the depth of color of *Rosy Veil*.

Gaillardias are not often received favorably on account of the difficulty in handling them, but the yellow *Mr. Sherbrooke*, the red *Ruby* and the tall upright *The King* are receiving much notice this year. *Mr. Sherbrooke* seems to indicate it will live under ordinary conditions.

In your autumn gardens, together with tall asters, the medium-growing *heleniums* should have more use. *Moerheim Beauty* is not new, but is not used enough. The new dark form, *Peregrina*, coming out this year, should be popular. It grows

about three and one-half feet high and has chestnut-colored flowers.

The gay *Chipperfield Orange* is gaining rapidly and will be one of our regular autumn plants soon. Plant these newer *heleniums* in the border. They will not become too tall nor untidy and will be gratefully appreciated.

Lavandulas are always desired, but have been too tender for us and too short-lived. There is being offered this year an R. H. S. award variety supposed to be real hardy, *Lavandula Twickel Purple*. It grows eighteen inches tall and has deep lavender blue blooms and is fragrant, too.

There are some interesting new oriental *poppies* being offered. This is a specialist's field I have not explored much, but *Mrs. Belago*, salmon pink with orange spots at the base, sounds interesting.

Physostegia Summer Glow is being hailed as a variation in that field and will be watched with interest.

For the vast field of cut flower growers, *Liatris scariosa alba* is going to be a fine addition. It has the same general habits as *scariosa*, but is white. It will fit well into the garden plants, too. At present the seeds come about seventy-five per cent true.

Pyrethrum Pink Bouquet is a rugged new double pink variety. It derives its name from its habit of throwing many flowers on one spike, and its favor from the fact that it keeps its head up and does not sprawl when in full bloom. It also does not reflex its ray petals even when through blooming.

The *phlox* family has had many additions in recent years. *Tigress*, *Columbia* and others have found a steady place. This year *Augusta* is joining them.

Esther Read, the new hardy double *Shasta daisy*, is here to stay. Once established, it is always in bloom and produces a mighty fine effect in the garden. It is excellent for cutting. The double, *White Swan*, and the frilled dainty semidouble, *Chiffon*, are also seeing much demand. Do not keep *Shasta daisies* in your greenhouses. If you pot them,

plunge them in a frame, as they do not like forcing.

Tritoma Tower of Gold is a good example of an older item quickly regaining favor. It is commonly used and with its newer mate, Royal Standard, should be used more freely. It dates back to Burbank's originations.

The multicolor hybrid tritomas are also quite hardy if originating from the proper strains. We have plants 3 years old in our garden showing twenty flowers or more at a time, with a blooming period of over six weeks. Three of these interesting varieties will be available next year.

Trollius Golden Queen is helping to repopularize that family which, with its hybrids of *europæus*, needs a spot in our semishady gardens.

Veronica Blue Spire is marching to a real favoritism and is especially popular if cut off severely after bloom, when it responds quickly with another crop. *Veronica spicata rubra* is really a slight misnomer, for it is only a deep rose, but it does not fade like its namesake, *spicata rosea*, and is really fine.

We all know *Rudbeckia purpurea* with its reflexed fading flowers. It does become rather unsightly as it grows older. Its prototype *Rudbeckia The King* has overcome these faults. It has a clear rosy red color to the end, and the petals never reflex. The cone also is attractive.

While on the west coast, I saw a fine new Apricot viola. I have not seen it offered, but no doubt it will be available as seed this year. I also saw some fine Iceland poppies, large and of good color, far and away better than the older strains.

There are several large groups, such as German and Japanese irises and peonies, I have not touched on at all.

One other large group has had no attention, the chrysanthemum group, now dominated by the various Korean seedlings. The first tall, rangy late Koreans have now come down to bushy early and medium plants in both single and double form. In the doubles, King Midas, Rapture, The Moor, Mrs. Sam T. Rotan and Ember are representative. In the singles, Sensation, Nancy Copland, Lovelight, Urchin and Pink Luster are among the leaders of the recent ones.

The Amelia, or Pink Cushion, type

has received immense publicity and has been sold in unbelievable quantities. Various colored sports have appeared and a new seedling, Achievement, is being offered this year. There should be a good market for this if it is at all like its first parent, and I understand it is so.

In England the most-talked-of novelties are, of course, the Russell lupines. The difficulty of growing them in this country will slow up any wide popularity, but they are extremely interesting in their new range of sizes and their distinctive coloring. The fact that the pouch is a distinct color from the upright gives the appearance of a barber pole, usually in distinct colors. The fact that plants will vary all the way from twelve inches to fifty inches is also interesting.

In the field of the future, I can see many important advances—pure pink platycodons, coreopsis with crested centers, true colored winter hardy delphiniums, red, yellow and pink large-flowered delphiniums; pink lily of the valley, 4-inch flowers on Michaelmas daisies, double and semi-double Shasta daisies and many others.

When thinking about your newer varieties to feature and telling your customers about them, have you ever given thought to really what constitutes a novelty?

Is it, as one would infer, something absolutely new, just being offered for the first time, or is it something good, new to most of your customers and not commonly in use? To me the latter definition is as im-

portant as the first. For example, no one can deny that *Chrysanthemum Amelia*, renamed Pink Cushion, although old, has been sold as a novelty in great numbers. During the war there were numerous such "sleepers" produced and sold only in a local area, waiting to be popularized many years later.

This year is rather a lean year so far as novelties are concerned, but we can always fall back on the better varieties of the previous years. Although it does take a little more effort, it repays many fold; so let us keep replacing the old by the new, if the new is better and deserves it.

WILBUR F. ILGENFRITZ.

Wilbur Fishburn Ilgenfritz was by popular acclaim made honorary president of the Michigan Association of Nurserymen at the banquet during the winter meeting at Lansing, February 2. The action was taken in recognition of his sixty years as a Michigan nurseryman. As token of this honor he was presented with an engraved silver-mounted gavel.

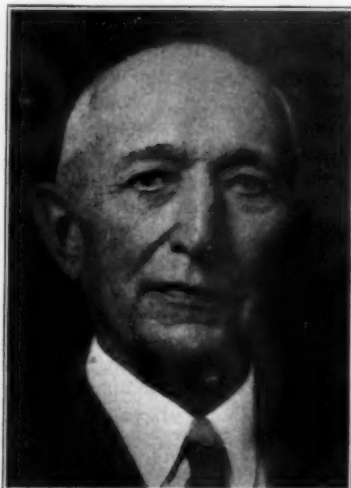
"Bill" Ilgenfritz, as he is affectionately known by most nurserymen of this country, has been the active head of I. E. Ilgenfritz' Sons Co. for more than forty years. His keen judgment of the nursery market and his ability as a grower of nursery stock have been great assets to his company. His fair and straightforward dealings with his fellow nurserymen have won him many friends, and while he has always been genial and kindly in his associations, he has never failed where courage and fearlessness were required.

An active church worker and Mason for many years, he has also had a part in civic affairs of his community.

Having a mechanical turn of mind, he has constructed all of the cellars in use by I. E. Ilgenfritz' Sons Co. and developed planting implements and digging plows which are in wide use in the trade today.

In his span of life he spent fourteen years as a nursery salesman during the horse and buggy days and has seen the nursery business develop through almost three-quarters of a century.

June 21 "Bill" Ilgenfritz will round out his eightieth year and is still an active nurseryman.



W. F. Ilgenfritz.

Identifying the Lindens

Third in Series of Articles Discusses Characteristics of the Small-leaved Linden, Tilia Cordata — By Leon Croizat, of the Arnold Arboretum

Tilia cordata was known to the English nation as the small-leaved linden, 'or lime, a long time before the Pilgrim fathers landed at the rock of Plymouth. The name has endured and, in some unaccountable way, it has even grown. Today are called *Tilia vulgaris* a great many *Tilia cordata* which happen to have leaves somewhat larger than those of the average run of the species.

The small-leaved linden is identified with ease if only it is kept in mind that the size of the leaf, as such, is a character of no value. I do not mean to say that in most cases *Tilia cordata* has leaves that are as large as those of other species, because that would not be true. What I wish to make clear, however, is that a linden may be *Tilia cordata* even if its leaves measure three or three and one-half inches across. Normally the leaf measures about two or two and one-half inches.

Regardless of size, when fully grown the leaf of *Tilia cordata* is hairless, bluish bloomy underneath. Fairly large tufts of woolly hairs occur at the fork of the main nerves. In the specimens that best represent the species the color of these tufts is chestnut brown, almost reddish. The teeth at the margin of the blade tend to point forward and to be triangular; in no case are they bristly, hooked or rimmed with a thin glass-like border. A trained observer will notice, furthermore, that in the small-leaved linden the veinlets that run between the main nerves are weak, not nearly so distinctly etched out as in other species. The name "cordata" (heart-shaped) is well chosen, because in this linden are seldom found leaves abruptly cut slantwise at the base. As a rule the leaves are notched, truly cordate (as botanists say), and sharply and shortly pointed.

The cluster of the flowers of this linden is a delicate structure, with a wing that to a greater extent than in other *tilia* tends to fold backward, finally standing at a right angle with the stem that supports it. The flowers are scarcely larger than a dime, if at all larger, pale of color and comparatively numerous in the cluster. I have

noticed on occasion frequent enough to deserve mention that the stamens (or thread-like parts that carry the fertilizing dust, or pollen) are orange to brick-colored at the tip, which to my knowledge is not seen to happen in other commonly cultivated lindens. While in the other species the clusters of flowers are borne hanging down, in *Tilia cordata* is noticeable a distinct tendency to carry them nearly horizontal, and even slightly upturned. This peculiar habit is one that I often use for identification in winter, when it is most easily noticed and most pronounced.

The fruit is scarcely larger than a good-size seed of orange, often shaped like a gourd or a pear, altogether smooth or weakly ribbed. It can be crushed between the fingers without the slightest effort. More frequently than in any other linden I know of, the fruit of this species tends to stay on the tree throughout the winter. It does not take a great deal of attention to spot it, etched against a glorious blue sky in a crisp wintry morn. Nor does it take a great deal of artistic talent to notice the peculiar combination of color that is displayed by the bud and by the growth of the last two seasons. In about fifty per

cent of the trees and saplings of the small-leaved linden the bud is greenish or yellowish throughout the winter, and the branchlet at the tip is bright yellow brown. This combination is unique, at least to the extent of the lindens that are in common cultivation. With little training anyone can perform the feat, amazing to the ordinary mortal, of walking briskly across the grounds of a nursery and of calling out many *Tilia cordata*. I think I have done it, and I know that I have seen others do it, too, as soon as they were told what to look at. The identification of the small-leaved linden in its leafless state is just as difficult as that of the Norway, sycamore and sugar maples, which is supposed to be trying, except when made on the whole plant. The unvarnished truth is, on the contrary, that there is nothing difficult in it. The whole point is to know what to look at.

Thus, about half the *Tilia cordata* can be recognized in winter by the contrast of the colors of the bud and of the twig. The remaining half does not present unreasonable difficulties, either. The slender, somewhat wavy branchlet is yellow brown even in the plants in which the bud becomes purplish or brownish, and this color of



Tilia Cordata, the Small-leaved Linden.

the branchlet is not found in other commonly cultivated lindens. In addition, the main leader in the twig tends to be as long as, or little longer than, the side shoots. The result of this tendency is the formation of a crowded spray which is well shown in the illustration on the preceding page.

The characters of identification that can be derived from the habit and peculiarities of this linden are numerous. A dendrologist soon learns that *Tilia cordata* is unlike every other European linden, and he is not surprised in learning that all the affinities of this species are with Asiatic, not with European species. While *Tilia cordata* is now found native in northern Europe, it is peculiar that it does not grow in the regions to which the plants truly native to Europe were confined when huge sheets of ice came down from Scandinavia at the time of the ice age, some fifty thousand years ago. I believe that *Tilia cordata* entered Europe rather late, as an Asiatic migrant, although I dare not believe that it is on this account that it frost-cracks badly in severe winters.

Leaving aside scientific or half-scientific theories for the present, I may suggest as additional useful pointers of identification the following:

(a) The bark is rough and dark, dull red and smooth on young branches and plants. The main limbs tend to run off the trunk at a right angle, or at least with but a shallow bend. Old trees, consequently, have a stiffer habit than either *Tilia vulgaris* or *Tilia rubra*, with which they might be confused.

(b) Flowers and fruits are produced in large quantity. At blooming time a healthy tree is covered with flowers, and later with fruits.

(c) When the bud breaks up, and the new growth begins to shoot forth, the strap-shaped scales (foliaceous stipules, to the botanist) standing at the foot of the leafstalk are comparatively larger and more persistent than in other species. They last but a few days, of course, but they are quite conspicuous meanwhile.

(d) The growth of the season turns and assumes winter colors in late July in certain plants, and in August in all other plants that I have seen.

A detailed account of the differences between *Tilia cordata* and, re-

spectively, *Tilia vulgaris* and *Tilia rubra* will be given in the articles that will describe these last two lindens. The small-leaved linden can be confused also with the Japanese small-leaved linden, which is one of its Asiatic relatives. We shall discuss the matter when the lindens from Asia come up for review.

FOTHERGILLA MONTICOLA,

[Concluded from page 2.]

long. Six to eight feet is this shrub's maximum height, whereas major, with its more compact pyramidal growth, may reach ten feet under optimum conditions. However, the plants may not even attain these proportions under some northern conditions, judging from the following comments made in the April, 1936, bulletin of the Morton Arboretum:

"Though it has not been found growing naturally north of Virginia, *Fothergilla* major seems to be perfectly hardy in this locality, and in spite of its preference for a moist, peaty or sandy loam, has succeeded in ordinary garden soil. It is not a fast grower, though, and in all probability will never exceed four feet in height. In extolling its good qualities, the glorious fall coloring of its foliage must not be overlooked."

Comments on similar points made in the December 29, 1933, bulletin of the Arnold Arboretum are equally interesting. They read: "As autumn comes on, they (*fothergillas*) again show their individuality by coloring most brilliantly. Some bushes are pure yellow, others are deeply overlaid with brilliant crimson, but in either case the colors are clear. As a result, from a short distance the leaves seem almost to shine as if they had been lacquered."

"They can be grown apparently in any good garden soil, though heavy applications of peat are reported as having a beneficial effect. One or two English writers have listed *fothergilla* as rooting from cuttings, but in this country it has been found a very difficult subject. The simplest method of propagation is to pot up small suckers from the base of established plants and to grow them until they are ready for a permanent position. The species can be grown from seeds sown when ripe and kept in a cool greenhouse, where they germinate in about six months. These seedlings

should be grown in small wooden flats for a year or so, and are then ready to be potted up." It is possible the use of growth-promoting substances would prove helpful in rooting the cuttings.

The flowers, which lack petals and owe their showiness to the long white stamens with yellow anthers, appear as tufts at the tips of the branches just as the leaves are unfolding. Usually the shrubs seem to be bare except for the tiny white bottle brushes. April and May are the flowering months, depending upon the latitude; at the Morton Arboretum, *F. major* usually blooms in early May. The *fothergillas* belong to the witch-hazel family and are so similar to their cousins, the witch-hazels, that more than one botanist has mistaken them for a lower, more compact witch-hazel at that season of the year.

Here, then, are shrubs with attractive features from early spring until late fall, and it appears only the limited supply of these springscents is holding them back from their rightful popularity. May the situation be remedied shortly. To round out their offerings, nurserymen should also propagate the dwarfest form of all, *Gardeni*, with a maximum height of three feet under the best conditions and probably somewhat shorter under most.

CALIFORNIA nurserymen may be especially interested in the January issue of the National Horticultural Magazine, in which Catherine D. Jones describes "Thirty More Climbers for California," the article covering forty-six pages, of which twelve are full-page plates. She contributed previous articles on climbers for that state in the January issues of 1936 and 1937 of the same magazine.

THE list of rare woody ornamental plant materials presented, with some brief descriptions, by Henry J. Hohman, of the Kingsville Nurseries, Kingsville, Md., at the Ohio short course, covers the eight mimeographed pages which compose the February issue of Nursery Notes prepared by L. C. Chadwick, Ohio State University, Columbus, from whom copies are obtainable. This bulletin is issued by the cooperating agricultural extension service.

Androsaces of Easy Culture

Many Rock Jasmines Refute the Popular Impression That They Are Difficult to Grow, Adding Much Beauty to the Alpine Garden — By C. W. Wood

So much has been written about androsaces, much of it relating how difficult they are to grow, the impression seems to have got around that all the species are just about impossible to grow in our climate. That opinion is apparently not confined to amateurs, either, for many commercial growers seem to share it. As a matter of fact, it is only a half-truth and, like so many of that ilk, has wrought great injustice upon a group of amiable beauties.

Of all the reputedly difficult alpine, including gentians, eritrachiums, primulas, saxifrages and androsaces, the last-named, excluding the saxatile species, are the safest bet for the beginner in alpine culture. It is quite true that some of the incrustated saxifrages are of fairly amiable dispositions and should be more used in American gardens, yet most of them suffer more in my northern garden from summer heat and drought than almost any of the androsaces which have their flowers in umbels. And according to my way of thinking, the saxifrages cannot compare in beauty with the latter, either in silvery rosette or in flower. It is easy, of course, to get into trouble in androsaces if one cares to try his luck with the solitary-flowered or aetian group—a quest that should be undertaken with the full understanding that lasting success is not a part of their outdoor culture under midwest conditions, and perhaps not in any part of the United States except in a few favored spots like the Puget sound country. But if one confines his efforts to the kinds which will be mentioned later, not only will enduring prosperity usually follow, but great satisfaction will be a part of the venture.

Asia is bountifully blessed with androsace species which have their flowers in umbels, most of them being hardy even here in northern Michigan, where the thermometer sometimes reaches as much as 40 degrees below zero, and all that I have grown are quite easy to manage under ordinary garden conditions. Among the loveliest of these Asians is *A. sarmentosa*, with large, woolly, silvery rosettes and

in early summer a riot of rose-pink flowers on 4-inch stems. It spreads by means of strawberry-like runners, at the end of each being a miniature rosette, which soon takes root, spreading beauty over quite a large area in time. The plant known in gardens as *A. Chumbyi* may be merely a form of the next preceding, as some say, or it may be a hybrid of *A. sarmentosa* and *A. villosa*, as others maintain, but in either case it is a treasure, because of its stunning beauty, great hardiness and ease of culture. From the gardener's standpoint it is merely a compact *sarmentosa* with a little more silver and fur in its rosette and with more brilliantly colored flowers. If I were restricted to one rock jasmine I think *Chumbyi* would be my choice. Variety *Watkinsii* is spoken of in European lists as being larger than the type and as having deeper-colored flowers. All of which sounds enticing, but plants I have grown from seeds are scarcely distinguishable from the type.

The culture of this *sarmentosa* group calls for no special skill and not a great lot of bother. I have found that they do best for me, under garden conditions, on a north slope where they can be given the benefit of shade from rocks during the middle of the day. The fertility of the soil is not so important as to have it well drained, for these woolly-leaved plants highly resent an excess of moisture around the crown at any season. I use the ordinary sandy soil of this section with about one-fourth as much leaf mold and a top-dressing of stone chips. Rosettes taken with an inch or two of runner attached and inserted in sand with the rosette resting on the surface root readily at any time of year and afford a sure means of rapid increase of stock.

Closely related to the preceding is *A. lanuginosa*, a lovely silvery creeper, lacking the runners of *sarmentosa* and its varieties, but spreading around among rocks, filling crevices with its silvery gray, ovate leaves and soft rose flowers on 4-inch stems from June onward throughout most of the summer. According to my way of looking at

these matters, it is the loveliest of the umbel-bearers, but it seems to be too tender for my climate. In any event, it has been lost so often during severe winters that I have given up trying to keep it. Speaking for my own conditions, the same may be said of variety *Leichtlinii*, which is similar in growth to the parent, but its flowers are white with a vivid crimson eye. In this climate they have to be given a position that is sheltered from winter winds, which usually means a southern slope, and that is too hot for summer unless they are given plenty of root moisture. In more temperate sections the treatment recommended for *sarmentosa* would serve the problem, for it seems just as amiable as the latter.

Two little Asiatic rosette-makers, *A. primuloides* and *A. sempervivoides*, should be mentioned before passing on to the easy kinds which hail from European mountains. The first-named is so closely related to *A. sarmentosa* that there is little call for the same garden to have both, yet there is a difference in the rosette, and *primuloides'* flowers are a pleasing pale pink. *A. sempervivoides*, although still belonging to the *sarmentosa* group, is so distinct and so beautiful it deserves the attention of every gardener. It makes tiny dark green rosettes, almost hairless, which spread conservatively into flat mats, over which shine a sea of deep pink flowers in umbels commencing in late spring and continuing more or less throughout the summer. Its specific name quite aptly describes its pretty little rosettes. Treatment similar to that given *A. sarmentosa* suits it.

European species of the silver-rosetted class are generally smaller than the ones from the Himalayas; likewise, with me, at least, they are a little more difficult, unless *A. villosa* is excepted. The one named is a silvery little mite, perhaps the most charming of the easily grown European kinds. It makes tiny, white-hairy, fluffy rosettes and has ivory white flowers on 2-inch stems, the blooms being quite large in proportion to the other plant parts. All these make a breath-taking spectacle and one not too difficult of attainment. In situations like that described in the

[Continued on page 12.]

A. A. N. News

CHAPTER ORGANIZATION.

The formation of chapters of the American Association of Nurserymen has proceeded rapidly during the past two months at trade winter meetings. While the technical details may require some time to complete, it is apparent that all but an extremely few states have taken the necessary steps to obtain representation on the board of governors of the A. A. N. when it meets in Detroit next July. In a good many cases the necessary signatures for charter applications have been obtained, and in a few cases the charters have been granted.

The important business of the chapters is the election of their delegates to the A. A. N. board of governors. Proceeding further, some chapters are adopting by-laws. The set drawn up for chapter No. 1, formed in Ohio, has been adopted almost verbatim by chapter No. 2, in Michigan. For the guidance of those who may be called upon to draw up by-laws for chapters in other states, the complete set adopted in Ohio is given here:

AMERICAN ASSOCIATION OF NURSERYMEN. Chapter No. 1.

The active members of the American Association of Nurserymen of the state of Ohio do hereby associate ourselves together for the purpose of completing the organization of a chapter as provided in article IV, sections 2 and 3, of the by-laws of said association.

Under authority granted in charter 1 of said American Association of Nurserymen dated at Washington, D. C., December 2, 1937, we hereby adopt and approve the following by-laws by which the activities of this organization shall be governed:

BY-LAWS.

Article I: The name of this organization shall be "The Ohio Chapter of the American Association of Nurserymen."

Article II: The geographical unit, from which membership in this chapter shall be comprised, is the state of Ohio.

Article III: The objects of this chapter shall be:

1. To elect delegates and alternates to serve on the board of governors of the American Association of Nurserymen.

2. To join with the delegates from the other chapters in the central region for the purpose of nominating the member of the executive committee of the American Association of Nurserymen to represent this region.

3. To engage in any lawful activities which will enhance and promote the interest and welfare of its members, the industry at large or the general public.

Article IV: Membership.

1. All members of the American Association of Nurserymen in this territory automatically become members of this chapter to participate in objects one (1) and two (2) as above stated and may participate in all other activities upon payment of dues as hereinafter provided.

2. New members applying for membership may be recommended to the executive committee of the American Association of Nurserymen and upon notification that they have been accepted shall become members of this chapter.

3. Membership in this chapter is contingent upon maintenance of membership in the American Association of Nurserymen in accordance with article III of that association.

Article V: Officers and Delegates.

1. The officers of this chapter shall be a president, vice-president, secretary-treasurer, and an executive committee, who shall be entrusted with the management of the affairs of this chapter and perform the usual duties of such offices.

2. The executive committee shall consist of the president, vice-president, secretary-treasurer ex officio and two others elected from the membership.

3. The election of these officers shall be by ballot or acclamation at the annual meeting of the chapter and they shall serve for one year or until their successors are chosen.

4. Delegates and alternates to serve on the board of governors of the American Association of Nurserymen shall be selected, in accordance with article IV, sections 2 and 3, of the by-laws of the American Association of Nurserymen.

5. The names of the delegates to serve on the board of governors of the American Association of Nurserymen shall be certified to the secretary of that association by the secretary of the chapter at least thirty (30) days before the annual meeting of the American Association of Nurserymen.

6. The delegates from this chapter serving on the board of governors of the American Association of Nurserymen shall join with the delegates from other chapters in the central region either at or before the annual meeting of the American Association of Nurserymen for the purpose of nominating the member of the executive committee to represent this region.

Article VI: Meetings.

1. The annual meeting shall be held at any time during the year so long as delegates may be selected in time to be certified to the secretary of the American Association of Nurserymen at least thirty (30) days before the annual meeting of that association.

Additional meetings may be held at the call of the president or at the written request of any five members of the chapter.

2. A quorum at any meeting shall consist of not less than one-third of the members of the chapter.

Article VII: Revenue. Dues may be assessed against the members of this chapter upon the recommendation of the executive committee by a two-thirds vote of the members present at any regular meeting, provided that the non-payment of these dues shall not deprive any member of the American Association of Nurserymen in this territory of participating in objects one (1) and two (2) of these by-laws.

Article VIII: Amendments. These by-laws may be amended at any regular meeting by a two-thirds vote of the members present, and shall automatically be amended to conform at any time that they become in conflict with the articles of incorporation and by-laws of the American Association of Nurserymen.

STUDY STATE LAWS.

The executive committee of the A. A. N., at its meeting in January, authorized the appointment of a committee to study existing state inspection and quarantine laws and report to the convention at Detroit next July. The purpose is toward making these laws more uniform and to discourage further state legislation tending to set up trade barriers. The committee has been appointed and consists of Lee McClain, Knoxville, Tenn.; Paul Stark, Louisiana, Mo.; Lester C. Lovett, Little Silver, N. J.; Harold S. Welch, Shenandoah, Ia., and Ray D. Hartman, San Jose, Cal.

TARIFF PROTEST.

The announcement that the government of the United States is negotiating with Great Britain for a reciprocal trade agreement carries with it mention of those products on which the United States will consider granting concessions, and among them are "cuttings, seedlings and grafted or budded plants or evergreen ornamental trees, shrubs or vines and all other nursery or greenhouse stock, not specially provided for."

In the belief that the existing tariffs on horticultural products should be maintained, the A. A. N. executive committee has authorized the filing of a protest with the committee on reciprocity information of the Department of State at Washington. The date by which such protests are to be filed is February 19, and public hearings are announced as opening March 14.

CONVENTION PLANS.

The committee on arrangements for the A. A. N. convention at Detroit, July 20 to 22, has laid out its entertainment plans. Preceding the convention, Sunday, July 17, will be provided a bus trip to the famous Greenfield Village created by Henry Ford, with luncheon at Dearborn.

Monday, a 6-hour boat trip in the afternoon and early evening will provide a period when affiliated associations can hold meetings with full attendance without interfering with convention sessions. Dinner and music will be provided on the boat. Business sessions will be held Tuesday, Wednesday and Thursday, the annual banquet taking place on Wednesday evening.

The arrangements committee consists of Harry E. Malter, chairman; Benjamin J. Greening, Harold P. Paul, Ralph I. Coryell and Bert J. Manahan.

The Book-Cadillac hotel has been selected as convention headquarters. All meeting rooms are air-conditioned, as well as some of the sleeping rooms. In place of the "Cold Storage Cellar" and "Packing Shed" of other years, there will be a garden provided with tables as a social meeting place.

FOR five years the New York Botanical Garden has provided a course of training for young American gardeners modeled after that in use at the Royal Botanic Gardens, Kew, England. More recently the program was broadened to permit an exchange of gardeners with Kew. Since the inception of the plan, thirty-two men have been admitted as student gardeners and twelve as apprentices. At present there are thirteen student gardeners and three apprentices. The positions received by the nineteen graduates indicate the thorough training received in the two to four years spent at the garden.

The Silver Lining in the Nursery Business

Perplexities of the Present and Their Future Solution Discussed by Joel P. Barnes in Address as President of New England Nurserymen's Association at Recent Convention

A year ago the main question in our minds was not whether our business would be better in 1937 than it had been in 1936, but how much better. We all thought it would be better, of course. Perhaps it was just our "new year" hopefulness.

Things looked real bright last January and February, for home building was well under way. Such a trend certainly makes an excellent outlet for our products and services. Then, too, other industries showed promise of a real boom. New activity was evident everywhere, and employment in these other industries jumped way ahead of previous years.

Such activity made us start thinking about the future and making definite long-range plans for handling an increased demand for our products. We stepped up the propagation in many items and then had a look about our property for increased growing land. In brief, that was the picture during the winter months.

Spring soon came upon us, and we gave little thought to the outside world. Our real interest was in getting our orders delivered and planted and our new spring planting taken care of. However, when a brief lull came, we read back about all of the strikes and different types of labor unrest that had been going on and was still continuing in other industries. Then, too, there was talk of war, not to mention the big stick which political Washington held over American business, with which you are all familiar.

Later on in the year, during our autumn business, there appeared a definite lull. We learned later that this was a recession or a mild depression. We might have had a good year if it had not been for this setback. Maybe it was a good thing in a way, for it made us think of the many problems which confront us today.

Actually, we are in this business of growing and selling plants to make a living and profit. Profits have been made in the past, and they will be made again. Will they be made on the same basis in which they were made in the past? I cannot say.

I doubt it very much, for we are in a period of transition. This change brings forth many serious problems for us to consider which may affect our potential earnings.

In every industry you will find that the outstanding organizations are those which keep up with the times in all of their activities. As nurserymen, we can go a long way in keeping up to date by improving the quality and standards of our products. Propagating and handling only the best strains or improved varieties is one safe step. Our buying public is becoming more particular every year, and customers will demand only the best plant of its

type, and in addition they expect to pay only a fair price for it. They will insist on having our personnel, our sales grounds and buildings neat and attractive, and that their orders be wrapped with the neatness and care which they would find in any modern store on Main street.

I'll pass briefly over propagation, for that is a subject in itself. Other than better selection of strains which I have just mentioned, we need to keep close track of our propagation. Don't grow too much of one thing unless you can prove to yourself that you can dispose of it without making a glut on the market and thus spoil the hope of making a profit for yourself and for other more conservative growers and dealers. Don't let your inventory list get too big and top-heavy. This means that you must not hesitate to discard an old variety when a newer improvement, of proven quality, has been brought upon the market.

Is your nursery soil in good condition, or has it been allowed to become depleted during the past few years? When you go home, it might be a good idea for you to check on it and make definite plans for its improvement. Good growing soil will be a great satisfaction to yourself and to your customers.

Another problem which faces us is labor. We must find ways of improving its efficiency. On an average, the labor cost in producing nurseries is over sixty per cent of our volume of business, while other industries which are competing for the same customer's dollar have a labor cost of from ten to twenty-five per cent. There is reason, therefore, to give labor serious consideration, since it is our biggest overhead expense. Labor offers the greatest opportunity for developing leaks and drains on our potential profits. What can be done about it? I wish I knew. Other industries have improved their labor by developing labor-saving machinery. It seems almost impossible for us to do that; so until some horticultural inventor comes along we can concentrate on improving the labor conditions which we have. Possibly there are many



JOEL P. BARNES.

Interest in organization work and native executive ability brought Joel P. Barnes to the head of important trade associations at an age when some young nurserymen just begin to attend them. Born December 27, 1909, at Yalesville, Conn., he started working for the Barnes Bros. Nursery Co. in January, 1929, and has been its manager since 1930. In 1933 he was elected president of the Connecticut Nurserymen's Association and in 1937 was chosen for the same office in the New England Nurserymen's Association. Last year he was made vice-chairman of the Council of Eastern Nurserymen. He has been keenly interested in cooperative effort through trade organizations as a means of raising standards and benefiting the industry. At home he is primarily interested in trying out new varieties of plants and in maintaining a clean, neat nursery. He is unmarried and has two absorbing sports hobbies, skiing in winter and sailing in summer.

operations you could improve upon by your own thought or by talking to others, which would reduce your labor costs. Possibly some improvement could be made in the personnel of your organization. Are they happy and are they working under satisfactory conditions? These conditions are essential for we must be prepared for the time in the near future when unionization in the nursery business becomes general. The union demands are strict and call for higher wages. If our customers do not like to pay higher prices than they do now, we must make up the difference in more efficient labor management. It is a serious problem, and one for all of us to solve.

I don't want to appear here with an unwarranted pessimistic attitude, but we have another problem—that of problems affecting us nurserymen in national legislation. You are all familiar with the good work already done by the newly reorganized American Association of Nurserymen in clarifying our position in relation to the social security act. This does not end our national problems, however, for there are many others, such as government nurseries operating in competition with those privately owned; the Jones act, which will make nurserymen out of farmers and at the government's expense; increase in government taxes from all angles; the possibility of coming under the wages and hours bill; the possible changes in federal quarantine 37. All of these problems and many more to come which we do not know about now, not including our own local problems, mean one thing. It means that we must cooperate in strengthening and supporting our state, regional and national trade associations.

If you are seriously engaged in the nursery business and want to stay in business, if you want insurance against government and labor interference legislation, if you want to know what is going on in the nursery world, if you consider your neighbor nurseryman a man worth knowing better, if you believe a group can do more than any individual for the betterment of the industry, if you want a voice in the activities of your own industry and save yourself real dollars, then get in back of your trade organization. In other words join the American Association of Nurserymen. It is reorganized for your benefit; its officers

want to solve your problems, and all they ask is your cooperation. Isn't that a fair deal?

Now we're really in a good business, and all of us are proud of it. The problems that come before us are all in the day's work—they really are not so bad or so difficult as they may sound. Gradually they are solved, and we look forward to the next with a feeling of security and ambition. We're in a pleasurable business. We're inside and out, often doing entirely different work from day to day, and it's healthy work too. How many of you would like to be behind an automatic machine locked in a cage all day? Not many of us, I'll bet.

What is the outlook for 1938? Anything can happen—nothing may happen. The natural enthusiasm for plants among most people and the love of the outdoors will always bring a demand for our products. The rest is up to us.

ANDROSACES.

[Continued from page 9.]

paragraph on *sarmentosa*'s needs and in a perfectly drained limestone soil, it normally goes cheerfully to work at its appointed task of adding beauty to the rock garden scene in a way few plants of equally easy culture can approach. Perhaps a few words regarding flower color in *A. villosa* may not be out of place, for it is a subject about which we read many conflicting statements. Nicholson says they are pink; Mrs. Wilder is of the same conviction; Bailey says white or rose with a yellow red throat; Correvon indicates pink and white, and Farrer is positive in his statement that they are white. Plants that I have grown from seeds on several occasions have been quite uniformly ivory white with a

golden eye. Perhaps variation is the answer. That *villosa* does vary is apparent from European lists, which show variety *arachnoidea* as being smaller of rosette, more silky and large-flowered, and its subvariety *superba* with still larger flowers. The other European species of the silvery-rosetted class, *A. Chamæjasme*, that I have grown has been far less tractable. It seems to want more root moisture than I have been able to give it in the garden, and I am not sure that its beauty, when compared with *villosa*, would justify the effort to make it thrive.

Among the fairly easy kinds, we have left a few green-rosetted ones from the mountains of Europe, of which *A. carnea* is perhaps the best known example. It makes small, emerald green, shining rosettes, which spread into fairly broad mats in a partly shaded spot on a northern slope, over which dance myriad bright pink flowers on 4-inch stems in early spring. It has a number of forms, but only one, *Laggeri*, that I know. This is more ample in rosette; the flowers are more freely produced and a deeper pink, and it seems to be a little more difficult to grow. In fact, I find all these nonhairy kinds, with the exception of *A. lactea*, less amenable than the woolly ones, requiring more moisture and being more impatient of hot sun. In addition, *A. carnea* is definitely an acid lover. On the other hand, *A. lactea* is a limestone plant and does quite well under ordinary rock garden conditions, provided it is not fried under the noonday sun. It makes the ordinary hairless, green rosette and bears its milk-white flowers (hence the name *lactea*) on 4-inch stems in spring.

To secure a stock of *androsace*, it is often necessary to grow the first plants

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from seeds, for these plants are not plentiful in this country. Fortunately, that is not a really difficult task, provided the grower has plenty of patience. First of all, fresh seeds are imperative. Sow them in autumn or winter, plunging the pans in an outdoor covered frame and darken the pans with several thicknesses of newspaper. Remove the sash when warm spring weather comes, but keep them handy in case frost threatens after germination takes place. If the seedlings are shielded from too bright sun and care is used in watering, there should be little trouble encountered in growing the tiny plants, but the process is sure to be slow. After stock plants are at hand, vegetative reproduction, as described before, or division is a quicker method of increase.

SHADE TREE FEEDING.

Data reported in 1937 have been added to the progress report on experiments dealing with fertilization of shade trees in the nursery which have been under way since the autumn of 1931 at Ohio State University. At that time a block of 500 Moline elms were planted in rows, 8x10 feet, in a well prepared field of silt loam soil, previously in an alfalfa sod. Trees were selected for a uniform height of seven to eight feet and a caliper of about six-tenths inch two feet above the soil. The block was divided into four sections, which received applications of fertilizer at different times, one in spring, one in spring and July, one in July and autumn and one in autumn. Each section was divided into five plots of twenty-five trees, each plot receiving a different mixture of commercial fertilizer.

The trees in all the plots were heavily pruned during the autumn of 1936, to enable the development of a top characteristic of the Moline elm, but no weight or measurement of the prunings was taken. This pruning resulted in a vigorous growth of the remaining branches during the spring and early summer of 1937.

In reviewing the data recorded during 1937 in the January, 1938, issue of Nursery Notes, L. C. Chadwick states that it is becoming more and more apparent as the experiment progresses that the inconsistency of the data recorded is indicative of the fact that fertilizer experiments on woody ornamentals outdoors must be

of a long-time nature. The tentative conclusions he draws from this 6-year test are the same as given last year, with the addition of the final one, as follows:

Ample moisture is necessary for a favorable response of small trees to fertilizer applications.

In general, fall applications appear more beneficial than those made in the spring.

A complete fertilizer high in nitrogen or a mixture of ammonium sulphate and superphosphate are best of the sources tested.

Applications of ammonium sulphate alone have given little stimulation.

Potash does not seem necessary in this particular soil type to date.

Ample moisture seems more important for stimulating growth of young trees in good soil than additional applications of fertilizers.

Severe pruning undoubtedly played

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a part in the inconsistency of the results during 1937 since the moisture supply was quite favorable during the year.

FIVE pages of cultural notes on hardy deciduous azaleas are contributed by Clement G. Bowers to the January issue of the Journal of the New York Botanical Garden.

Wisconsin Meeting

One-day Convention Filled by Business Session, Addresses and Chapter Formation

Although ice and flood waters on the highways kept the attendance down to about forty, the annual meeting of the Wisconsin Nurserymen's Association, at the Republican hotel, Milwaukee, February 10, was otherwise one of the best it has held, the program holding the interest of all throughout morning and afternoon sessions.

The morning opened with a business meeting, at which action was taken to amend the by-laws to permit nurserymen outside the state to become associate members. Another amendment was to increase the directors from three to six and to discontinue the legislative committee, transferring its work to the board of directors.

Officers Elected.

The nominating committee, consisting of T. A. Singer, chairman; L. J. Baker and Harry May, brought in the following slate at the afternoon session, which was adopted, as follows: President, T. A. Singer, Milwaukee; vice-president, Willard Dustrude, Hartland; secretary-treasurer, H. W. Riggert, Fort Atkinson; director for one year, N. A. Rasmussen, Oshkosh; director for two years, H. W. Haskins, Pardeeville; directors for three years, Floyd B. Faneher, Sturtevant, and Karl Junginger, Madison. Two directors remain from the former board, James Livingstone, Milwaukee, and Thomas S. Pinney, Sturgeon Bay.

M. C. Hepler, who has served the association as secretary-treasurer for several years, has left the nursery business to sell real estate. A rising vote of thanks was given for his services in the past, and he was elected an honorary member of the association.

Discussion of assessments on growing nursery stock for taxation as personal property revealed that the state tax commission held such stock taxable, but considered the various factors that might reduce its value, such as subsequent attacks by insects or diseases, drought, inability to sell, etc.

President's Address.

In his short message as president, Karl Junginger stressed the necessity of developing the sales organization to parallel an increase in production if one is to avoid overproduction and consequent difficulties. A portion of his remarks follows:

"We have all been reading much about business conditions, and your guess about whether conditions are going to be better the coming spring is probably as good as mine. One thing is certain. Much nursery stock will be planted this spring, whether or not there is an increase over the past spring. We can all get our share if we go out and work for it, and we can get it at prices that spell a profit.

"Certainly there is one thing we all know, and that is that in this day and age you can't consider business conditions without considering what the government is doing, for the activities of the government itself have become one

of the strong influences affecting the business situation. The old law of supply and demand is no longer sufficient unto itself.

"In this regard, I suppose we have all been taking into consideration the new housing act, which seems to be one of the pieces of legislation which are to become law during this session and which will have a direct affect on our own business operations. Everybody knows that this country has fallen far behind in the matter of new home construction, and this action on the part of the government promises to correct that situation to a certain extent. There is every indication that the additional home construction program will exert a favorable effect on the nursery business in general.

"This increased demand for stock, added to the normal demand, which is ordinarily quite steady when the public has the purchasing power to buy, might make us more conscious than ever of some of the scarcity that does exist today in the cases of certain varieties. We all know that the droughts and the unseasonable weather of the past few years have had a serious effect on the supply of stock available. But in our business we cannot correct such situations overnight as the manufacturer does. We can't speed up machinery or put on another shift and at once take care of a suddenly increased demand for the varieties of stock that are currently proving most popular.

"The records of the past, however, show that nurserymen in general do make an attempt to overcome shortages, and too often in so doing they make serious mistakes. So one word of caution I want to pass along today is not to try to correct a shortage by

overplanting. Instead of pursuing that policy, follow a policy of building up your sales organization so it will parallel the growing end of your business. In other words, don't grow stock unless you have a sales organization that you know can sell that stock, and sell it at a profit. The planning of a growing campaign is not profitable for the nurseryman unless he plans a sales campaign to go along with it."

E. L. Chambers, state entomologist, after distributing instructions with regard to early action against grasshoppers, discussed federal quarantine 37 at length. He noted the possibility of changes, but asserted the quarantine as a whole was here to stay.

After luncheon, Prof. G. W. Longenecker, of the landscape department of the University of Wisconsin, talked on planning the home grounds, with special reference to a farm home, assembling an illustration as he talked by means of felt cut-outs.

Contact Selling.

An especially fine talk was that on contact selling by Charles G. Crabb, sales manager of a large Milwaukee manufacturing concern and instructor of sales promotion at Marquette University. He distributed a mimeographed list of principles of salesmanship, listing eleven buying motives which have been determined by extensive tests and checks. Then he went through the list to show the application which might be made of each buying motive in the sales talk of a nurseryman. A subsequent issue will carry a fuller summary of the talk in its direct application to nursery stock sales.

"National Aspects of Nursery Legislation" was the subject of extensive discussion by Miles W. Bryant, past president and member of the executive committee of the American Association of Nurserymen. After noting various phases of the ruling with regard to the federal social security tax, he commented on various pieces of legislation,

Closing-out Sale

25,000 HEMLOCKS

To be sold at once

On account of not being able to negotiate a satisfactory renewal of our lease, we are forced to dispose of the above quantity of Hemlock during the coming season. Approximately 70 per cent of this stock is *Tsuga Canadensis*, 1 to 16 ft. The remainder is *Tsuga Caroliniana*, 1 to 10 ft.

Plenty of beautiful specimens, either *Canadian* or *Carolina*, suitable for individual plantings are available, also types suitable for hedges, screens, etc.

Ask for special quotations, advising quantity, size, type, etc. In return you will receive prices that are so reasonable you cannot afford to consider other sources of supply while our stock lasts.

Buyers of this stock will also be granted special low prices on nursery-grown and collected native *Rhododendrons*, *Azaleas*, etc.

We will consider reasonable bids for blocks or fields.

WILDWOOD NURSERIES

Blowing Rock, N. C.

SHADE TREES

	Per 10	Per 100
Ash, Am. White, 10 to 12 ft.	\$7.50	\$65.00
Ash, Am. White, 2 to 2 1/2-in. cal.	15.00	125.00
Catalpa Bungei, 5 to 6 ft.	7.50	65.00
Elm, American, 10 to 12 ft.	7.50	65.00
Elm, American, 1 1/2 to 2-in. cal.	9.00	80.00
Elm, American, 2 to 2 1/2-in. cal.	12.50	115.00
Flowering Crab, 3 to 4 ft.	4.00	....
(Eleyi, Floribunda, Hops, Sargentii)		
Japanese Cherry, 8 to 10 ft.	7.50	65.00
Japanese Cherry, 4 to 5 ft.	4.50	75.00
Jap. Weeping Cherry, 1-yr.		
5 to 6 ft.	13.50	125.00
Maple, Norway, 8 to 10 ft.	9.50	85.00
Maple, Norway, 10 to 12 ft.	11.00	100.00
Maple, Norway, 2 to 2 1/2-in. cal.	20.00	185.00
Oak Pin, 2 to 2 1/2-in. cal.	25.00	....
Oak Pin, 2 1/2 to 3-in. cal.	40.00	....
Plane, Oriental, 2 1/2 to 3-in. cal.	20.00	....
Poplar, Lombardy, 8 to 8 ft.	2.50	20.00
Poplar, Lombardy, 8 to 10 ft.	3.00	25.00
Poplar, Lombardy, 10 to 12 ft.	4.00	35.00

Write for prices on other varieties and sizes.

WAYNESBORO NURSERIES, INC.
Waynesboro, Virginia

APPLE TREES

We offer to the trade an extra-fine lot of 1-year Apple Trees; all grown from Whole Root Grafts. A complete list to select from. This stock is unusually vigorous and strong. Your customers will like these trees.

Send us your list of requirements for special booking prices.

E. W. Townsend Sons Nurseries
Wholesale Dept.
Salisbury, Maryland

LINING-OUT STOCK

Complete list of deciduous lining-out stock this year.

Place your order now for Spring shipment, and avoid disappointment when wanted.

THOMAS B. MEEHAN CO.
Dresher, Pa.

PRIVET and BERBERIS
Splendid Stock

Write for Special Quotations

LESTER C. LOVETT

Milford Delaware

Ampelopsis Veitchii Forcing Roses
Barberry Thunbergii

And Complete Line of Nursery Stock

C. R. BURR & COMPANY, Inc.
Dept. A—Manchester, Conn.

Canterbury Boxwood

Buxus suffruticosa and *B. sempervirens*.
Selected uniform plants; bushy and foliated to center; masses of fibrous roots. Finished specimens from 4 inches up, ready for quick shipment. Prices lower, plants larger. Ask for special list.
CANTERBURY, Box A, Easton, Md.

noted recently in these columns, and then related the work undertaken by the A.A.N. to protect the interests of nurserymen at large.

What Is Fair Price?

Alex Klockner, president of the Milwaukee County Landscape Gardeners' Association, spoke briefly on "What Constitutes a Fair Price on Nursery Stock?" From the point of view of the retail jobber of nursery stock, he said, a number of different items go into the cost, in addition to the price which has been paid to a wholesaler for trees or shrubs. Such expenses included those of shipping, handling, selling, delivery, guarantee, overhead and several others on which he elaborated more fully. One is good will, since there is a definite expense connected in its production, by making replacements when stock has not been guaranteed, by taking time to give advice and information, and in other ways. Another item of expense is the surplus that is not sold, which must either be carried along or else burned. Taxes and insurance formed an increasing expense. On top of all these should be added a profit larger than that of the ordinary merchant because the year's business must be done in a couple of short seasons. Beyond this is the planting cost, and a profit should be made on that as well. He believed a greater amount of attention given to these costs would produce fairer prices and better service to the public.

Form A. A. N. Chapter.

Members of the A. A. N. present gathered after the meeting to form the Wisconsin chapter, electing Karl Junginger chairman and Thomas S. Pinney secretary. For delegate to the board of governors W. G. McKay, Madison, was chosen, with Oscar Hofer, Kenosha, as alternate.

A set of by-laws was adopted, following a draft prepared for the Illinois chapter. This follows closely the form of the Ohio by-laws, which appear on another page of this issue, with some slight changes chiefly for brevity.

MEDAL TO DR. CROCKER.

Dr. William Crocker, director of the Boyce Thompson Institute for Plant Research, at Yonkers, N. Y., was awarded the gold medal of the American Institute for "his contribution to knowledge of life processes in plants and for his unique leadership in the organization of plant research," at a dinner held in his honor at the Hotel Ambassador, New York, February 3. Dr. Crocker organized the Boyce Thompson Institute and has directed it from its founding in 1921, having been professor and director of research and plant physiology at the University of Chicago for many years previously.

THE Couch Bros. Nursery Co., McMinnville, Tenn., has established a branch at Lebanon, Ky. The new establishment is under the management of three brothers, Howard, Benton and R. C. Loring.

DR. A. F. YEAGER, recently of the North Dakota agricultural college, has accepted a position in the department of horticulture at Michigan State College, where he will continue his breeding work and also do some teaching.

GRAFTED JUNIPERS

We offer the following varieties for spring delivery from 2 1/2-in. pots, grafted on *Juniperus virginiana* understock.

J. chinensis columnaris glauca
J. chinensis columnaris viridis
J. chinensis neoboriensis
J. chinensis Sargentii
J. chinensis Sargentii glauca
J. squamata
J. squamata argentea
J. squamata Meyeri
J. japonica aureo-variegata
J. virginiana Burkill
J. virginiana Canadensis
J. virginiana elegantissima
J. virginiana glauca
J. virginiana globosa
J. virginiana Keteleeri
J. virginiana Kosterii
J. virginiana Schottii
J. virginiana pendula
J. virginiana pyramidiformis

Price \$25.00 per 100

HESS' NURSERIES
Mountain View, New Jersey

Jackson & Perkins
Company**Wholesale Nurseries**

NEWARK
NEW YORK STATE

LINING-OUT STOCK

Connecticut Valley Grown
Seedlings - Rooted Cuttings
Evergreen and Deciduous

Write for list
C. E. WILSON & CO., INC.
Manchester, Connecticut

PRINCETON NURSERIES
of PRINCETON, N. J.

SUPERIOR
Hardy Ornamentals

QUALITY NURSERIES

Allenwood, Pa.
Largest Nursery in Central Pennsylvania
Special Prices
on
Hemlock—Yew—Arbor-vitae

GENERAL NURSERY STOCK
Specimen and Lining-out
FAIRVIEW EVERGREEN NURSERIES

Fairview, Erie Co., Pa.

Pennsylvania Goes Alone

*Form State A. A. N. Chapter and
Withdraw from Eastern Council*

Not in many years has there been such a large attendance of nurserymen as put in an appearance at the annual meeting of the Pennsylvania Nurserymen's Association at the Hotel Brunswick, Lancaster, February 2 and 3. At least 100 persons were present when the roll was called, with twenty-nine nurseries represented.

President Conrad J. Albrecht's address brought out the high points of what was accomplished during 1937, stating that it was a year of reconstruction and the emergence of new and stronger state and national organizations.

The admirable report of Secretary Albert F. Meehan brought out some interesting facts—that of seventy-three active members of the Pennsylvania state association, fifty were members of the national body, that over \$1,200 had been paid to the A. A. N., not including a good sum contributed to the support of the Washington office of the executive secretary.

Halt Sale of State Trees.

The reports of standing committees brought to light some interesting data, among which was the fact that some real action had been taken in the matter of law enforcement to discontinue the unlawful disposal of state tree seedlings, after a period of years when such trees became of marketable sizes. John Howes Humphreys, who presented this report, praised Chief Nursery Inspector Meaney for his efforts in bringing this unethical business to an end.

W. S. Carver's report on state college cooperation lamented the fact that horticulture was not yet receiving its share of attention comparable with other branches of study at the state college. Prof. R. P. Meahl, in rebuttal, emphasized the desirability of more frequent visits by the nurserymen and promised personally to bring to the notice of the college's president these averred shortcomings.

B. F. Barr gave a report on the farm products show at Harrisburg and urged upon the members a better representation of our industry, especially in view of the fact that a million-dollar building was being erected, which would provide more and better space for exhibition purposes.

The state secretary of agriculture, J. Hansell French, said this new structure would be ready for the 1939 show and expressed the hope that Pennsylvania nurserymen would participate as never before. He stated that while the committee's suggestion of having the date of the show changed to February was perhaps a good one, those in charge of this annual event felt bound by years of tradition, dating back to colonial days, to keep to the usual January date.

Form A. A. N. Chapter.

For a brief period during the afternoon of the first day's session those representing the membership of the A. A. N. discussed the important matter of forming a Pennsylvania chapter,

and it was evident, in view of the fact that contiguous lines had been obscured by recent action of other nursery state associations, Pennsylvania would act independently in this matter. A nominating committee was appointed to present nominations for delegates to represent the association in the national body; the resultant vote elected the following persons as delegates: Robert Pyle, Rhea Elliott, H. G. Seyler, Albert Meehan and Charles Hetz, and as alternates: Frank LaBar, Eugene Muller, Louis E. Wissenbach, Conrad Albrecht and Walter Stein.

The after-dinner session held much of interest for all concerned when Richard P. White, A. A. N. executive secretary and contact man at Washington, presented some pertinent high lights of bills and measures which seriously affect nurserymen and allied industries. A ray of encouragement was given by Dr. White in telling his hearers of the proposed federal housing program. This, he said, would create a large outlet for nursery products, since ornamental plantings could be paid for out of F. H. A. loans. Dr. White was accorded warm appreciation for the amount of good work he has accomplished during the short time he has been in office.

Fred D. Osman, representing the Council of Eastern Nurserymen, was given the opportunity to set forth the ideals and aims of the organization. He ably presented his plea for cooperation and a closer affiliation.

A pleasant interval was afforded on the second day in the presentation of Adolph Muller's famous illustrated story of the dogwood. In the absence of Mr. Muller, Eugene, his son, gave us the story in technicolor, augmented by historical and cultural items of interest.

A disturbing element was created by interpretation of the recently enacted state bonding and licensing law for dealers in farm products. Primarily this law is intended to benefit the producing farmer, who has for years been victimized by unscrupulous dealers and middlemen, but in the minute interpretation of the law, which includes all products of the soil, it became evident

that nurserymen were affected, because most of them, in addition to being producers, are automatically dealers when they buy from a brother nurseryman to fill orders from time to time. What effect it will have on the "little fellow" is not hard to see, and it was hoped a modification might be forthcoming.

Withdraw from Eastern Council.

During the hours of the closing session, a discussion led by Robert Pyle, Rhea Elliott and Peter Van Melle, secretary of Allied Retail Nurserymen's Association, gave the members an opportunity to decide on the question of continuing affiliation with the Council of Eastern Nurserymen. This resulted in a motion being carried by vote that the Pennsylvania Nurserymen's Association discontinue its membership in the C. E. N.

The nominating committee's report of H. G. Seyler for president, L. E. Wissenbach for first vice-president and W. S. Carver for second vice-president, resulted in their being elected to serve during the coming year, with Bert Meehan being again installed as secretary-treasurer. Edwin Matthews.

KENTUCKY ANNUAL MEETING.

At the annual meeting of the Kentucky State Nurserymen's Association, at the Kentucky hotel, Louisville, January 31, Alvin Kidwell, Sparta, was elected president to succeed M. J. Yopp, Paducah. Mr. Kidwell was succeeded in the secretary's office by Howard Tilson, Lexington, state nursery inspector. J. W. Fike, Hopkinsville, was elected vice-president and Nick Verberg, Anchorage, was reelected treasurer. Charles Michler was reelected executive committee man.

The association voted to apply for a charter as a chapter of the American Association of Nurserymen, and Louis E. Hillenmeyer, Lexington, was elected delegate to the board of governors of the national association.

Since funds for state control measures in regard to the Japanese beetle were not provided in the budget recently adopted by the general assembly, Mr. Kidwell was named chairman of a committee to work with other agricultural groups in an effort to get action. Others on the committee are Nick Verberg, Anchorage; R. L. Haag, Jefferson-town, and Tom Claxton, superintendent of Cave Hill cemetery, Louisville. W. A.

Bay State Nurseries

INCORPORATED

NORTH ABINGTON and FRAMINGHAM, MASS.

OFFER

A GENERAL LINE OF NURSERY STOCK AT COMPETITIVE WHOLESALE PRICES. SPECIALIZING IN TAXUS, AZALEAS, RHODODENDRONS AND ODD ITEMS YOU ARE UNABLE TO LOCATE ELSEWHERE.

ASK FOR OUR PRICE LIST

TAXUS CUSPIDATA CAPITATA

(Upright Japanese Yew)

Compact heavy specimens, 5 ft. to 8 ft. high, growing 6 feet apart in rows.

Roots very fibrous and dug with perfect balls.

Quotations on any quantity.

PEEKSKILL NURSERY
Croton Ave. Peekskill, N. Y.

KRIDER OFFERS

Complete Line of Nursery Stock
100,000 Fruit Trees
100,000 Roses
150,000 Perennials
Lining-out grades Shrubs,
Evergreen Seedlings
200,000 Amoor River Privet

WRITE US TODAY FOR
WHOLESALE LIST

KRIDER NURSERIES, Inc.
410 Acres Grown by Experts
Middlebury, Indiana

MOLINE ELM

All sizes from 8 to 10 feet up to 4 inches.
Transplanted. Carload quantities our
specialty.

EVERGREEN NURSERIES, INC.
Majestic Bldg. Milwaukee, Wis.

DOUGLAS FIR SEEDLINGS

\$32.50 per 1000; \$200.00 per 10,000
\$1750.00 per 100,000

Finest quality from northern Colorado
and Wyoming seed.

A complete stock of lining-out ever-
greens and shrubs. Preliminary list
mailed on request.

SCOTCH GROVE NURSERY, Scotch Grove, Iowa

BOYD NURSERY CO.

We are located at the home
of rare Mountain Trees, Shrubs and
Hardy Ferns.

Lining-out stock.
Trees and Shrubs.

Write for trade list

McMinnville, Tenn.

HARD MAPLE

At sacrifice prices to reduce surplus
6 to 8 ft. to 2-in., 40c and up.

Can use some exchange.

Perry Nurseries, Perry, Iowa

Asparagus Roots

We offer to the trade one of the largest
plantings of 1 and 2-year roots in the
east. Write us for prices.

E. W. TOWNSEND SONS NURSERIES
Salisbury, Maryland

Price, state entomologist, pointed out that of the eleven beetles trapped last summer in 400 boxes set up in Louisville, Lexington, Covington and Frankfort, ten were caught at Louisville and one at Lexington.

Howard Tilson discussed control of other insect pests of fruit and shade trees. Other speakers included Mr. White, Mr. Claxton and Ben Niles, Henderson.

RHODE ISLAND MEETING.

The annual meeting of the Rhode Island Nurserymen's Association was held at the Providence Biltmore hotel, Providence, February 9. When President C. H. Gorton called the meeting to order at 10 a. m., the roll call disclosed fifteen members present, which number was increased by several late arrivals.

The report of the legislative committee was given by Hugo H. De Wildt, who advised that the matter of state licensing of nurseries had been taken up with the department of agriculture and conservation. In Rhode Island there are seventy-two licensed nurseries, of which about twenty-five are really entitled to the term of nurserymen. The committee proposed to the department that some distinction should be made between those entitled to be so termed and those who have been licensed merely to comply with shipping regulations. The department promised to cooperate in this. The committee was also instructed to take action in regard to the ever-present state nurseries. The state nurseries in Rhode Island were brought into being to furnish material for roadside beautification, but a large part of the items being grown are of no use for that purpose.

Three new members were voted in: Princess Pat Nurseries, Barrington, R. I.; Barrington Nurseries, Barrington, R. I.; J. Moretti, Cranston, R. I.

Mr. Vaughan, of the Rhode Island unemployment compensation board, explained the manner in which applications for unemployment compensation were handled. He gave us several instances of this work.

After luncheon, Burton K. Harris, director of the department of agriculture and conservation, spoke briefly on the many opportunities we had to make Rhode Island one of the beauty spots of the east. He assured us of every bit of cooperation within his power.

Dr. Jesse A. De France, of Rhode Island State College, gave us a talk on propagation with root-promoting substances and told about several experiments which he is carrying on at the state college in this connection.

The following officers were elected for 1938: President, V. J. Vanicek, Newport; vice-president, Hugo De Wildt, Greenwood; secretary, J. C. Brownell, Newport; treasurer, Hugo Key, Newport.

The reorganization of the national and regional associations was fully explained by Mr. De Wildt and Mr. Vanicek. Mr. De Wildt made a motion that the Rhode Island Nurserymen's Association tie in with these two groups and all members join both regional and national associations. This motion was seconded by Mr. Vanicek and was passed unanimously. A sliding scale of dues is to be determined at a later date. All dues are to be paid into the state association and disbursements made to other organizations.

J. C. Brownell, Sec'y.

EVERGREENS

- Seedlings
- Potted Liners
- Small Transplants
- Specimen Trees

And a general assortment of shade trees, shrubs, small fruit and phlox.

Write for special quantity prices.

SHERMAN NURSERY CO.
53 Years — — — 1000 Acres
Charles City, Iowa

LINING-OUT STOCK

	10	100	1000
<i>Berberis atropurpurea</i> , 1-year-old; from 2 1/4-in. pots	\$7.00	\$60.00	
<i>Buxus suffruticosa</i> , from beds	5.00	40.00	
<i>Ilex cornuta</i>	\$1.25	10.00	90.00
<i>Ilex crenata major</i>	1.25	10.00	
<i>Ilex opaca</i>	1.25	10.00	90.00
<i>Ilex cornuta</i>	1.75	15.00	
<i>Ilex cornuta</i> (Barfordii)	1.75	15.00	
All <i>Ilex</i> 1-year-old, from 2 1/4-in. pots			
<i>Pittosporum Tobira</i> and variegata, 1-year-old; from 2 1/4-in. pots	1.25	10.00	90.00
<i>Abies</i> <i>jujubifolia</i>	3.50	25.00	
<i>Ginkgo biloba</i> , 1-year seedlings	5.00	40.00	
<i>Ginkgo biloba</i> , 2-year seedlings	6.50	50.00	
<i>Kalmia latifolia</i>	5.00	40.00	
<i>Magnolia grandiflora</i>	10.00	90.00	

FRUITLAND NURSERIES

Augusta, Ga.



Fine assortment of Fruit Trees, Shrubs, Evergreens—priced low.

Write for our wholesale circular. Big savings possible.

MALONEY BROS. NURSERY CO.
Danville, New York

HEMLOCKS

Sheared and several times transplanted
Write for our list

CURTIS NURSERIES
CALLICOON NEW YORK

THE WESTMINSTER NURSERIES

WESTMINSTER, MARYLAND

Fruit and Shade Trees, Evergreens, Shrubbery, all sizes up to 7 ft. California Privet, 3 to 7 ft., in grades. Heather, assorted, 8 to 18-in. clumps. Evergreen Privet and Barberry, Perennials, etc.

We have a very complete line. Trade list sent on request.

HARDY AZALEAS

Kaempferi, *Poukhanensis*, *Schlegelii*, *Microcarpa*, *Vaseyi*, *Enkianthus* *Campanulifolius*, *Rigida*, *Taxodium* *Dist.*, *White Spruce*, *Norway Spruce*, *Austrian*, *Lumber Pine*, *Specimen Yew*, 12 to 15-foot spread.

Send Want List

BRIMFIELD GARDENS NURSERY
245 Brimfield St., WETHERFIELD, CONN.

HERBS

Pot-grown plants: over a hundred varieties. Dried Herbs for Flavoring and Fragrance. Other plants of unusual character and with the charm of old-time gardens.

Write for Catalogue

Weathered Oak Herb Farm, Inc.
BRADLEY HILLS, BETHESDA, MARYLAND

Michigan Members Triple

Large Gain in Membership Produces Record Attendance at Annual Convention at Lansing

Reflecting a membership increase of nearly 200 per cent in the past year, the Michigan Association of Nurserymen had the largest attendance on record at its seventeenth annual convention, at the Olds hotel, Lansing, February 2 and 3. In consequence of the membership drive, the roster of twenty-eight a year ago had been increased to almost eighty, and special credit was given to President Arthur L. Watson, Secretary Harold E. Hunziker and Harold Paul, membership chairman.

The convention opened with the reading of the president's message by Arthur L. Watson on the afternoon of February 2. He briefly reviewed the high points of association activity in the past year. He said, in part:

President's Address.

"At our first executive meeting, which we held at Lansing last March, I told the committee that the thing our association needed most was more members, and to get and keep them we should keep them informed on what our association was doing. With that in mind, we decided to publish our news-letter, which we called 'Michigan Nursery News,' of which you have received eleven copies. Through this and the efforts of Harold Paul, chairman of the membership committee, and his committee, we have been able to increase our membership from twenty-six to seventy-eight.

"Your executive committee has been in constant contact with Mr. Mandenberg's office, and many violators have been brought to time. We also put a new bill through the state legislature with two outstanding items in it: First, the reciprocal agreement with other states, whereby firms from other states may ship in here without a Michigan license if our firms ship into those other states without their license; second, made it unlawful for anyone in the state to obtain a license to resell any stock from seedlings received from a state or federal nursery.

"We cooperated with the American Association of Nurserymen in fighting the social security tax and kept you informed as to the results. We also cooperated by being the first state to go over the top with the subscription to the Washington representative fund.

"Now for a few recommendations: (1) Continue 'Michigan Nursery News,' as I feel that this has been one of the biggest single factors in increasing our membership. (2) Appoint a standing committee to confer with the heads of the department of landscape architecture at Michigan State College relative to broadening the landscape course to equip the students for service with the landscape contractors or nurseries offering landscape service. (3) Appoint a committee to confer with the heads of the extension department of Michigan State College relative to the policy now in force. (4) Appoint a vigilance committee, to be composed of five or more members and headed by the secretary of the association, to report to the proper state authorities any firm or in-

dividuals handling nursery stock or native material without a state license or without a certificate of inspection. The object in having the committee headed by our secretary is that we can have a record of all violations, and over a period of years, this may be valuable to us as an association."

The report of the secretary-treasurer showed a small balance, as it was decided to give each member one ticket to the banquet without charge.

So many members crowded into the small room to hear L. C. Chadwick, professor of floriculture at Ohio State University, talk on "Use of Growth-promoting Substances as a Stimulus for Rooting Cuttings of Shrubs" that time out was taken afterwards to move to a larger room. Mr. Chadwick briefly covered the material presented in his two articles in the American Nurseryman last autumn, answering the particular questions of members as to response of various plants.

W. W. Wood, of the United States Department of Agriculture, read a detailed exposition of the work of plant inspection on the Canadian border and particularly that done through his office in Detroit.

Showing slides of pests of nursery crops, Prof. E. I. McDaniel, of the department of entomology at Michigan State College, discussed the latest methods of controlling the insects. Her purpose was, Miss McDaniel said, to make nurserymen more familiar with these insects, the control measures for which would be found in detail in the college's bulletin on the subject. She stressed the importance of using the right insecticide at the right time in the right way.

Business Session.

A short business session included a report of Benjamin J. Greening as chairman of the legislative committee, who emphasized the necessity of watching government activities closely in order to avoid dire results from legislation. He distributed mimeographed copies of a letter from the general counsel of the Michigan unemployment compensation commission indicating that

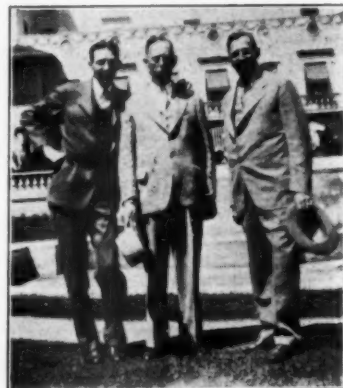
the state would follow the federal government in its interpretation of nursery workers as agricultural labor.

Reporting on the federal housing program, Ralph Coryell stated the F. H. A. would, in its loans on small dwellings, allow an item of five per cent for ornamental planting among the miscellaneous details, or up to \$125.

Bert J. Manahan reported for the nominating committee, which recommended the reelection of the officers and members of the executive committee whose term expired. These are: President, Arthur L. Watson, Grand Rapids; vice-president, Eldon H. Burgess, Galesburg; secretary-treasurer, Harold E. Hunziker, Niles; executive committee, Harold Paul, Monroe, and Eugene Heuser, Hartford. The hold-over members of the executive committee are B. J. Manahan, Romeo, and N. I. W. Kriek, Lansing.

Banquet.

In the evening was a well attended banquet, at which the guest speaker was Col. John O. Emery, past national commander of the American Legion and



The Trio Sings Again.

several times president of the Grand Rapids real estate board. Speaking on "The Prospects of Building and Its Effects on the Nursery Business in 1938," he entertainingly cited the ancient relations of nurserymen and real estate men through quotations from the Scriptures and then seriously set forth the statistics and circumstances that favored building activity in this country in the near future. The lengthy

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Portland Wholesale Nursery Co.

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A complete line of
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Catalogue sent on request.

A. MCGILL & SON

FAIRVIEW, OREGON

Wholesale Only

Our usual line of quality nursery stock, including Shade and Flowering Ornamental Trees and Specialties, Fruit Tree Seedlings and Roses.

Grown Right and Packed Right

A card will bring our list of items that will make you some money.

**RARE SHRUBS
and TREES**

Some hardy anywhere.

Many not obtainable elsewhere in U.S.A. are described and offered in

GARDEN ARISTOCRATS 1938

Copy on request to any firm in the trade. Please write on business letterhead.

W. B. CLARKE & CO.

San Jose, Calif.

MILTON NURSERY CO.

Milton, Oregon

"Pioneer Nursery of the Northwest"

Fruit, Shade, Flowering and Ornamental Trees, Fruit Tree and Chinese Elm Seedlings. Car lot advantages to all points east.

Send for our Trade List.

ORENCO NURSERY CO.

Orengo, Oregon

Wholesale Growers

Fruit, Shade, Flowering Ornamental Trees, Fruit-tree Seedlings, Roses, Etc.

Very complete line of quality stock

Catalogue sent on request.

CHINESE ELMS**Seeds and Seedlings**

ULMUS pumila, commonly called Chinese or Siberian elm, and ULMUS parvifolia, Lacebark elm.

HOME NURSERY CO.

Richland, Wash.

talk had the close attention and interest of members present.

Arthur Krill read a series of charges against Wilbur F. Ilgenfritz and then presented him with a gavel, an engraved band on which testified to his election as honorary president of the Michigan association. The venerable Mr. Ilgenfritz responded briefly, receiving hearty applause.

Amateur entertainers, brought from Grand Rapids by President Arthur L. Watson, appeared on the program. Community singing was featured by a solo rendered by Roger Champion, Perry, O., and by an impromptu trio consisting of Bert Manahan, Arthur J. Cultra, Onarga, Ill., and Horton Bowden, Geneva, N. Y.

Association Sponsors Film.

Paul Krone, of Michigan State College, at the morning session February 3, showed several hundred feet of film which he and Harold Paul had gathered in the past year, preparatory to compiling a collection of interesting plant and landscape scenes to be sponsored by the association for exhibition to garden clubs and other organizations.

Harold E. Hunziker talked on "Labor Profits vs. Labor Costs," giving the results of his studies of planting costs. He quoted considerably from John Surtees, favoring his method of figuring planting costs for individual types of plants, rather than using a general average of twenty-five per cent of the amount of the order. He recommended basing calculation of overhead charges on labor costs.

Clarence O. Siebenthaler, past president of the American Association of Nurserymen and now chairman of its executive committee, talking on "The National Business Outlook," dwelt on the importance of federal legislation in affecting that matter. After speaking at the New England Nurserymen's Association convention at Boston the preceding week, he had spent two days in Washington with the executive secretary, Richard P. White. He referred to conferences with forest service officials as the most satisfactory so far. He called attention to the iniquities contained in the proposed corporation license act. Work is being done by the national association, he said, to facilitate nurserymen's bidding on and government purchase of trees and shrubs. In relating the activities of the national association, he emphasized the importance of membership in that body by every nurseryman in the country large and small.

Round-table Talks.

Concluding the session, a round-table conference was held under the chairmanship of B. J. Manahan, of the Pontiac Nursery Co., Romeo, who gave a few minutes to each of several speakers.

E. C. Mandenberg, state nursery inspector, briefly referred to his work and told of the excellent control of the Japanese beetle through the application of arsenate of lead.

Benjamin J. Greening reported the fund for the Washington representative of the A. A. N. now exceeded \$16,000.

Ralph Coryell, Birmingham, briefly recited the provisions of the state sales tax law as applied to nurserymen.

Dr. V. R. Gardner, head of the department of horticulture at Michigan State College, referred to the fruit

Azalea mollis
(Chinese Azalea)

Ceanothus prostratus
(Mahala Mat)

Thuja orientalis aurea nana
(Berckmans' Golden Arbor-vitae)

Arctostaphylos Uva-ursi
(Kinnikinnick)

And many others, both old and new, in our complete line of Evergreens

**BROAD-LEAVED
AND CONIFEROUS**
Lining-out and Balled Stock
Rooted Cuttings

Write for Wholesale Trade List
Giving Descriptions and Prices

Sherwood Nursery Co.

141 S. E. 65th Ave.

Portland, Ore.

**Oregon-grown
ROSEBUSHES**

Send
for
List

PETERSON & DERING, Inc.

Wholesale Rose Growers
SCAPOOSE, OREGON

**New Rose
TEXAS CENTENNIAL
(Red Hoover)**

Plant Patent No. 162

Ask for color illustration
and prices.

Also for our general list
of roses.

DIXIE ROSE NURSERY

Tyler, Texas

PACIFIC COAST NURSERY

1436 N. E. Second Ave. PORTLAND, ORE.

Largest Fruit Tree Seedling Growers
In America.

We accept growing contracts for 3 to 5 years.
Quality stock. References on request.

John Holmason, Prop.

Please Mention

THE AMERICAN NURSERYMAN

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descriptions he had supplied the association in consequence of his talk a year before, and he offered further service in that direction in connection with trees and shrubs if desired.

Several 1-minute talks by members on prospects for 1938 indicated a shortage of stock and the possibility for good business if sales efforts were well directed. When called upon, F. R. Kilner, editor of the American Nurseryman, having just returned from attending several nurserymen's conventions in the east, reported a better general feeling in the midwest, particularly in the horticultural field.

Final Resolutions.

The resolutions committee consisting of James I. E. Igenfritz, chairman; B. J. Manahan, Harold Paul and N. I. W. Krick, presented resolutions based on the recommendations in the president's address, which were adopted by vote, as follows:

(1) That a standing committee be appointed to confer with the head of the department of landscape architecture at Michigan State College relative to broadening the landscape course to equip the students for service with landscape contractors or nurseries offering landscape service.

(2) That a committee of three be appointed to confer with Prof. Baldwin and the other heads of the extension department of Michigan State College relative to the policy now in force on the following points: (1) The making of free landscape plans. (2) The practice of making estimates covering the cost of landscape jobs.

(3) The practice of recommending nurseries, either in or out of state as sources of supply.

(4) The practice of recommending native or wood-lot stock for landscape use. (5) The practice of supplying specifications for landscape jobs without naming sizes and ages of specified materials.

(3) That a vigilance committee be appointed annually by the executive committee of the Michigan Association of Nurserymen, said committee to be composed of five or more members, headed by the secretary of the Michigan Association of Nurserymen. The duties of this committee shall be to report to the chairman of the committee and he in turn to report to the proper state authorities any firms or individuals handling nursery stock or native material without a state license or without a certificate of inspection.

(4) That the Michigan Association of Nurserymen go on record as opposing the lifting or changing of quarantine 37, which now limits and prohibits the importation of certain nursery stock, bulbs, plants, etc., and that the secretary be instructed to forward a copy of this resolution to Secretary of Agriculture Wallace, Lee A. Strong and all senators and representatives from Michigan.

Inasmuch as Vice-president Eldon H. Burgess, Galesburg, was absent because illness confined him to bed, a message of sympathy was voted to be sent by the secretary.

Exhibits in the meeting hall consisted of Michigan peat in packages, displayed by the Arthur L. Watson Nurseries, Grand Rapids, and trees and shrubs from the Greening Nurseries, Monroe.

Form A. A. N. Chapter.

Following luncheon, a meeting of Michigan members of the American Association of Nurserymen voted to elect the same officers as headed the Michigan Association of Nurserymen. Harry Malters, appointed as temporary chairman, was therefore succeeded by Arthur L. Watson as presiding officer.

The by-laws adopted by the Ohio chapter were read, discussed and adopted with only one change, that indicated voting at chapter meetings may be by proxy.

A nominating committee selected the following slate of delegates and alternates, which was unanimously approved: Delegates for 2-year term, Benjamin J. Greening, Ralph Emlong and Walter Coon; delegates for 1-year term, B. J. Manahan, Harold Paul and Ralph Coryell; alternates, Harry Malters, Arthur L. Watson, Eldon H. Burgess and Harold E. Hunziker.

TENNESSEE GROUP MEETS.

Advertising Program Asked.

John Franklin Varnell, Cleveland, was elected to succeed D. P. Henegar, McMinnville, as president of the Tennessee State Nurserymen's Association at its thirty-third annual convention, at Cleveland, February 10 and 11. A. J. Byrn, of Byrn Landscape Service, Inc., Dickson, was named vice-president and Prof. G. M. Bentley, of the University of Tennessee, Knoxville, was reelected secretary-treasurer. Mayor J. Y. Elliott welcomed the nurserymen to the city.

At the opening session at the Cherokee hotel, President Henegar scored tax-free competition in his official address, charging trees are being sold through county agents and post offices cheaper than nurserymen can produce them. He suggested that a committee be named to plan an advertising program and present it at next year's convention.

In the afternoon of the first day, the nurserymen visited Hardwick farms, inspecting the landscaped gardens and the thoroughbred cattle.

At the banquet in the evening, a special sound picture was shown, featuring wild plant and animal life in the jungles of Africa along the equator.

Speakers on Second Day.

A speaker on the program the second morning of the convention was Sam F. Brewster, commissioner of conservation, Nashville, who told the group about the advertising campaign started last October to bring more tourists into the state.

Joseph Galloway, director of recreation of the Cherokee national forest, speaking for Supervisor P. F. W. Prater, who was unable to attend, gave a history of the forest. In commenting on the planting of roadsides along the forest roads, he declared that similar work will undoubtedly become more important on the main highways in the state.

Other speakers at this session were H. Cobb Caldwell, of the Ashford Park Nurseries, Atlanta, Ga., who spoke on "Future Prospects of the Nursery Business," and Mr. and Mrs. Clint Dade, Chattanooga, who presented an illustrated talk on "Ornamentals and Their Uses at Home and Abroad." Robert Howes, of the planning division, T. V. A., Knoxville, discussed "Recreational Developments on T. V. A. Properties."

The visitors were taken on an automobile tour of the Cherokee national forest in the afternoon, and other nearby points of interest were also visited. Nashville was selected as the convention city for next year.

ELECT AT PITTSBURGH.

Officers for 1938 of the Western Pennsylvania Nurserymen's Association, which meets the second Friday of each month at Pittsburgh, are as follows: President, Dr. A. F. Dewerth, horticultural consultant for the city of Pittsburgh; vice-president, Albert Pallack, of Pallack Bros., Bellevue; treasurer, L. Delmont Schwab, Freeland Nurseries; secretary, Frank Curto, superintendent of the conservatory at Schenley park, Pittsburgh; directors, L. E. Wissenbach and E. E. Freeland.

ALLIED RETAIL OFFICERS.

Officers of the Allied Retail Nurserymen's Association for 1938, elected at the annual meeting, January 10, at White Plains, N. Y., are as follows: President, Howard C. Taylor, Tarrytown, N. Y.; vice-president, H. Sherwood Guernsey, Schoharie, N. Y.; treasurer, R. Langle, Jr., Eastview, N. Y.; secretary, P. J. Van Melle, Poughkeepsie, N. Y. As delegates to the Council of Eastern Nurserymen were elected P. J. Van Melle, H. S. Guernsey and H. C. Taylor.

A committee composed of D. Leslie Scott, retiring president, S. Bernath and J. Witte was appointed to confer with the New York commissioner of agriculture at Albany, January 24, as to means by which the commissioner could best cooperate with nurserymen.

Inasmuch as Albany nurserymen reported reorganization of the capital district body, the proposal to merge the three constituent organizations into one association was dismissed as unnecessary. Dues for the Allied Association and the Eastern Council were set at \$9.50 per member. District dues are left to the decision of each of the three district organizations.

To ESTABLISH a nursery business at Hearne, Tex., Mr. and Mrs. J. H. Waley and their son are erecting buildings and procuring necessary equipment.

All Kinds of

FRUIT TREES

Heavy grades of
Peach, Apple, Plum and
Apricot

SHADE TREES

Ornamental Trees, Shrubs
and Evergreens

Can supply Carload lots.

Send want lists.

**SOUTHERN NURSERY &
LANDSCAPE CO.**

Winchester, Tenn.

Special Sale of Fine Landscape Material

These prices good only until the following quantities are sold. First come, first served. All stock will be fresh dug, but we have no frost in the ground here and we can ship anytime.

200 Jap. Barberry, 18 to 24 ins., bushy	Each
transplants	\$0.12
100 Beauty Bush (Rohlfitzia), 3 to 4 ft.	.35
200 Philadelphus Virginialis, 2 to 3 ft.	.20
75 Rose Seligera, 2 to 3 ft.	.10
150 Frabel's Spirea, 18 to 24 ins.	.11
500 Spirea Vanhouttei, 3 to 4 ft., fine bushy	.10
1000 Privet Amer North, 2 to 3 ft., fine stock	.05
500 Gynosphilia Bristol Fairy, 2-yr. field-grown; No. 1 stock	.17
100 Chinese Elm, 6 to 8 ft., nice, straight	.30
25 American Elm, 2 to 2 1/2-in. caliper	1.10
25 American Elm, 2 1/2 to 3-in. caliper	1.50
25 American Elm, 3 to 3 1/2-in. caliper	2.00

Fine straight nursery-grown trees. Terms: Cash with order. Free packing.

HARMON NURSERY Prospect, O.

20,000 **ELMS**, American, Vase, Moline, up to 4 inches, transplanted.

4,000 **MAPLE**, Norway, up to 2 1/2 inches, transplanted.

2,000 **WILLOW**, Thurlow, 8 to 10 ft. and 10 to 12 ft.

10,000 **SPIRÆA**, Vanhouttei, 3 to 4 ft. and 4 to 5 ft.

Send for list on many other items.

C. M. HOBBS & SONS, Inc.

Bridgeport, Indiana

Largest Nursery in Indiana. Established 1875.

BARBERRY THUNBERGII SEEDLINGS

1-year

6000, 3 to 6 ins. 8000, 6 to 9 ins.

25,000 **Ampelopsis Veltheil**, 1-year seedlings

2,000 **Ampelopsis Veltheil**, 2-year transplants
Asparagus, Pedigreed Washington, 2-year
Hydrangea Pee Gee, 3 to 4 ft. and 4 to 5 ft.

T. B. WEST & SON

Maple Bend Nurseries Perry, Ohio

BOBBINK & ATKINS

Nurserymen

Rutherford, New Jersey

Request our catalogues describing the uncommon in nursery items.

PEONIES

All types, including Tree Peonies

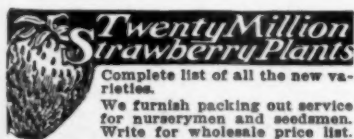
The Cottage Gardens
Lansing, Mich.

BARBERRY SEEDLINGS

1-year

20,000 **Atropurpurea**
100,000 **Thunbergii**

100,000 **Rose Multiflora Japonica**
Cook's Nurseries, Geneva, O.



E. W. TOWNSEND SONS NURSERIES
Salisbury, Maryland

CALIFORNIA SEEKS MEMBERS.

In a bulletin issued from the office of Henry W. Kruckeberg, secretary of the California Association of Nurserymen, a 1938 campaign for 1,000 voluntary contributing members has been launched. There are approximately 2,650 licensed nurserymen in California operating on a commercial basis, aggregating an annual turnover of about twenty millions of dollars, and of this number only a representative minority are members of the association, although this represents an estimated sixty-five per cent of the annual volume and value of nursery products. At the Oakland convention, September, 1937, it was realized that numerical strength is equally important to successful cooperative action as volume, and a volunteer membership plan to include all paid-up licensed nurserymen was adopted. Without obligation, all nurserymen in California are considered members of the association unless declining. The 1938 administration is hopeful that the plan will be successful and tend to solidify and achieve progress for the trade. Voluntary dues are set at \$3 for those doing a yearly business of from \$100 to \$3,000 and on a sliding scale up to a limit of \$25, for those whose volume reaches \$20,000 to \$25,000.

Albert B. Morris of San Fernando, president, announces standing committees for 1938 as follows:

Arbitration: James R. Crombie, Oakland; S. Nishida, Los Angeles; J. A. Moffit, Ceres.
Citrus-tropical Fruits: F. A. Teley, Jr., Riverside; John A. Armstrong, Ontario; Lonnie M. Jones, San Dimas.

Deciduous fruits: William T. Kirkman, Jr., Bethany; A. H. Steinmetz, Portland; Chris. Bergholdt, Newcastle.

Grades and standards: George C. Roeding, Jr., Niles; Harold McFadden, Compton; H. J. Scherer, Long Beach; Frank Tuttle, San Jose; Eugene Fowler, Newcastle.

Insects and diseases: R. D. Hartman, San Jose; Jean C. Watt, Ontario; L. P. Sorenson, Bakersfield.

Legislation: Roy F. Wilcox, Montebello; R. D. Hartman, San Jose; Charles Howard, Hemet; James R. Crombie, Oakland; Harry A. Marks, Los Angeles.

Native vegetation: Theodore Payne, Los Angeles; J. H. Van Barneveld, Puente; Teichi Domoto, Hayward.

Nomenclature: Teichi Domoto, Hayward; Paul Doty, Portland, Ore.; Edward H. Rust, Pasadena.

Plant introductions: W. B. Clarke, San Jose; Richard Westcott, Los Angeles; Robert Cundy, Pasadena.

Program and publicity: H. A. Marks, Los Angeles; R. D. Hartman, San Jose; J. A. Armstrong, Ontario.

Trade exhibits: Harold McFadden, Compton; Roy F. Wilcox, Montebello; J. H. Van Barneveld, Puente; G. S. Wallace, San Jose; H. Plath, San Francisco.

Transportation: John A. Armstrong, Ontario; M. R. Jackson, Fresno; Charles Howard, Hemet; Manfred Meyberg, Los Angeles; H. A. Hyde, Watsonville.

Viticulture: S. A. Gebhart, Fresno; Frank Tuttle, San Jose; A. Pastor, Inglewood.

Hollywood will be the scene of the 1938 convention of the association, dates for which are set for September 21 to 23. The volunteer membership campaign, it is predicted, will result in a larger attendance than at any previous gathering.

FRED COWLES, proprietor of the West Concord Nursery, West Concord, Minn., is spending the winter in California.

THE H. L. PEAREY NURSERY CO., Route 2, Box 132, Salem, Ore., operated by Harry L. Pearey as sole owner, has thirty acres devoted mainly to growing filbert nursery stock, though a full line of nut, fruit and shade trees and roses is grown for wholesale and retail. The retail yard is at 245 Court street, Salem. H. L. Pearey was a member of Pearey Bros. until the firm was dissolved in June, 1937.

SCHWEDLER MAPLE

Grown here in mile-high northern Colorado where our cool climate produces stocky, well branched, heavy specimens. We have a small block of beautiful, straight, well rooted 6 to 8-ft. trees at

\$12.50 per 10 \$110.00 per 100

CARAGANA ARBORESCENS

2-year seedlings	100	1000	5000
6 to 9 ins.	.....\$0.75	\$ 5.00	\$15.00
9 to 12 ins.	.....1.00	7.00	22.00
12 to 18 ins.	.....1.25	10.00	.....
18 to 24 ins.	.....1.75	14.00	65.00
2 to 2 ft.	.....2.25	20.00	78.00
3 to 4 ft.	.....4.00	35.00	150.00

RUSSIAN OLIVE

1-year seedlings	100	1000
1300 9 to 12 ins.	.....\$1.50	\$12.50
2600 12 to 18 ins.	.....2.20	17.50
2200 18 to 24 ins.	.....3.00	25.00

Entire lot of 7100 for \$115.00 if cash in full accompanies order.

25 per cent will book your order for early spring shipment.

Frank M. Richard, Jr.

P. O. Box 363 Fort Collins, Colo.

SPECIAL 10,000

SILVER LACE VINES

(Polygonum Aubertii)

2-year No. 1.

\$12.00 per 100

Grown by experts

KRIDER NURSERIES, Inc.

Middlebury, Indiana

Amor River North Privet Cuttings

Let us make up your cuttings from our tried and proven "MOTHER BLOCKS." Genuine Amor River North Privet. All cuttings hand sorted. Cash-with-order price, \$1.50 per 1000, 5000 for \$5.00. Packing free. Order at once.

ALTA VISTA NURSERIES

Davenport, Iowa



EVERGREENS

For Seventy-four years growers of Quality Evergreens Lining-out Stock a Specialty

Write for Trade List

EVERGREEN NURSERY CO.

Established 1864 STURGEON BAY, WIS.

CHINESE ELM

ULMUS PUMILA (Northern Strain)

Hardy Northern Type—Mature stock, power dug. Immediate or later shipment.

Write for prices.

TOLLESON NURSERIES

Denver, Colo.

EVERGREEN SEED

For BEST results plant Colorado Blue Spruce seed. From the BLUEST of the BLUE trees. We can supply NEW CROP seed from selected trees only, at \$3.50 per lb. Prepaid. Dwarf Yucca Glauca, NEW SEED, at 75c per lb. A good Rock Garden Plant.

Rocky Mountain Evergreen Co.

Evergreen, Colorado

Coming Events

MARYLAND SHORT COURSE.

Two Days at College Park.

The annual short course for nurserymen will be held in the horticultural building of the University of Maryland, College Park, February 22 and 23. The program is as follows:

FEBRUARY 22, 9 A. M.

Registration.
"Peculiar Landscape Plants," illustrated, by Prof. R. W. Curtis, of Cornell University, Ithaca, N. Y.
"The New Things Among Flowering Trees and Shrubs," with natural color slides, by Donald Wyman, of the Arnold Arboretum, Jamaica Plain, Mass.

FEBRUARY 22, 2 P. M.

"Growth-promoting Substances for Propagating Plants," by A. E. Hitchcock, of the Boyce Thompson Institute for Plant Research, Yonkers, N. Y.
"Spring Bloom and Autumn Color in the Arnold Arboretum," with Kodachrome movies, by Donald Wyman.

FEBRUARY 23, 9 A. M.

"Flowering Cherries and Crabs," by Henry J. Hohman, of the Kingville Nurseries, Kingville, Md.
"Mineral Nutrition of Trees," by A. L. Schrader, of the University of Maryland.
"Peculiar Landscape Plants" (continued), by R. W. Curtis.
"Other Work of Interest at the Boyce Thompson Institute," by A. E. Hitchcock.

FEBRUARY 23, 2 P. M.

It is hoped to have Dr. Bradford, formerly of the University of Michigan, Ann Arbor, Mich., talk for an hour on practical plant propagation at this time.
Annual meeting and election of officers of the Maryland Nurserymen's Association.

A registration fee of \$2 will be charged. The cost of the luncheon will be 60 cents each day.

Ideas Aplenty.

"In arranging the program of this year's short course," states Julian J. Chisolm II, secretary of the Maryland Nurserymen's Association, "we congratulate ourselves in bringing together for your benefit some of the leading scientific men of the country who thoroughly understand the practical side of the nursery business and who are able to put over to you ideas and methods that will increase the efficiency of your establishment and put dollars in your pocket."

"All of you who have attended our courses in the past are familiar with Professor Curtis, his immense enthusiasm for plant material and his interesting methods of putting his ideas across."

"Donald Wyman, since he has been at the Arnold Arboretum, has spent considerable time and labor photographing in natural colors the vast amount of material that is growing there. His natural-color slides and movies are the finest in the country, and no nurseryman should pass up the opportunity of seeing them."

"A. E. Hitchcock is an associate of Dr. Zimmerman at the Boyce Thompson Institute and has, probably, spent more time working with growth-promoting substances than any other man in the country. What he will have to tell you means more dollars to you."

"Dr. Schrader has spent a great deal of time on the problem of mineral nutrients for trees. It has only been in recent years that concerted study has been given this problem and Dr. Schrader is in a position to give you practical and valuable information on this subject."

"Hank" Hohman and his great en-

thusiasm for unusual plant material are known to practically every nurseryman in the east.

"Dr. Bradford has spent years at Michigan working on propagational problems. Recently he was brought here by the United States Department of Agriculture and is in charge of the trial gardens at Bell. If he can arrange his plans, and we certainly hope he can, he will give you some awfully good dope on propagation."

"No nursery meeting is complete without the presence of that emissary of good will and ambassador at large of the nursery industry, Richard P. White. 'Dick' will be on hand to give you an outline of the many problems that seriously affect the nursery industry, which are now appearing in Washington."

"Every nurseryman who can come is welcome, and we hope he will have a very interesting and profitable two days."

NORTHEASTERN OHIO SCHOOL.

A two-day school for nurserymen, sponsored by the Lake County Nurserymen's Association, the agricultural extension service and the department of horticulture of Ohio State University, will be held February 22 and 23 at the federal building at Painesville, O. Admission is free. The schedule of talks follows:

TUESDAY, FEBRUARY 22.

9:00 A. M.—"Effect of Synthetic Growth Substances on the Rooting of Cuttings of Woody Plants," by L. C. Chadwick, associate professor of horticulture, Ohio State University, Columbus.

10:30 A. M.—"Should I Grow Dwarf Fruit

WILLIS NURSERY CO.

Wholesale Nurserymen

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MOUNT ARBOR NURSERIES

E. S. Welch Est. 1875 Shenandoah, Iowa

A COMPLETE LINE OF GENERAL NURSERY STOCK—ASK FOR TRADE LIST

Send us your WANT LIST for quotations
"One of America's Foremost Nurseries"

HILL'S EVERGREENS

Complete assortment of lining-out sizes
Also larger grades for landscaping
Send for our wholesale catalogue

D. HILL NURSERY CO.

EVERGREEN SPECIALISTS
Largest Growers in America
Box 402 DUNDEE, ILLINOIS

Trees!" by H. B. Tukey, chief in research, division of pomology, New York experiment station, Geneva.

1:15 P. M.—"Use and Abuse of Plant Material" (illustrated), by Harold C. Esper, general campus foreman, Ohio State University.

2:30 P. M.—"Bringing the Budding List Up-to-date," by H. B. Tukey.

4:00 P. M.—"Preliminary Results of Minor Elements and Acidity on the Production of Rose Blooms," by L. C. Chadwick.

Evening—Dinner-dance with Lake County Nurserymen's Association in charge.

WEDNESDAY, FEBRUARY 23.

9:00 A. M.—"Recent Scientific Advances in Ornamental Horticulture of Interest to Nurserymen and Landscape Gardeners," by Harold C. Esper.

10:30 A. M.—"Social Security as It Affects the Nursery Industry," by Howard Chard, sales manager, Storrs & Harrison Co., Painesville, O.

11:30 A. M.—"The Extension Service and the Nurseryman," by F. G. Haskins.

1:15 P. M.—"What Are the Trends in Demand for Ornamental Nursery Stock?" by L. C. Chadwick.

2:15 P. M.—"Behind the Scenes of Chardon Maple Festival," by Paul Denten, secretary, Chardon Maple Sugar Festival, Chardon, O.

3:00 P. M.—"Magnifying Markets," by C. H. Henderson, director of trade expansion program, Cleveland chamber of commerce.

3:30 P. M.—Discussion of merchandising, by Melvin E. Wyant, rose specialist, Mentor, O.

The sponsors of the school have increased the scope of the program considerably this year. They feel fortunate in securing Dr. H. B. Tukey, of the New York experiment station, Geneva, to discuss two important phases of fruit stock production. Ample time will be allowed for discussion of these or other problems. Every nurseryman interested in fruit stock production should be present.

THE Baldwin Park Nurseries have been established by H. W. Fields and E. M. Struter at 911 West Vineland, Baldwin Park, Cal.

V. I. MASTERS, former landscape architect for the Kansas state highway commission, has joined the staff of the Sauer Nursery Co., Topeka, Kan.

JEWELL Wholesale

Hardy Minnesota-grown
Nursery Stock and Liners

THE JEWELL NURSERY CO.

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Lake City, Minnesota

LINING-OUT STOCK B & B EVERGREENS

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Hardy, 2-year, field-grown budding stock. Finest stock ever grown. Write for List.

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TREE SEEDLINGS

Per 1000	18 to 24 ins.	12 to 18 ins.	6 to 12 ins.	4 to 6 ins.
OSAGE ORANGE	\$6.00	\$4.50	\$3.00	\$2.75
HONEY LOCUST	6.50	5.00	3.75	3.50
MARY WASHINGTON ASPARAGUS, heavy 1-year,	\$4.50 per 1000,	\$42.50 per 10,000.		

Satisfaction guaranteed, prompt shipment, free packing. Cash with order.

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We offer to the trade an up-to-date list of the leading varieties to select from. All of these trees are grown on our farms in Maryland. They have shaped up nicely and have a well balanced fibrous root system—the kind of stock that will please you and your customers.

We invite your inquiry and offer special prices on early bookings.

E. W. Townsend Sons Nurseries

Wholesale Dept.
Salisbury, Maryland

KANSAS NOTES.

Frank Pfum, owner of the Shawnee Nurseries, is moving his nursery from the town of Shawnee, Kan., to the new highway 50 cut-off south of Shawnee.

M. W. Watson, Topeka, Kan., has been awarded a contract for roadside improvement in Richardson county, Nebraska.

W. D. Brewer has established a nursery sales yard at 4418 Park street, Kansas City, Mo.

A new nursery has been started at Kirksville, Mo., by Pearl Fife.

The Kansas Landscape & Nursery Co. sponsors a radio program on the Salina station, and the Sarber Nursery Co., which has been heard for some time over WIBW, Topeka, is now also broadcasting over KMBC, Kansas City, Mo., as well.

C. A. Chandler, president of the Chandler Landscape & Floral Co., Kansas City, Mo., has gone to the Rio Grande valley in Texas to look after the grapefruit interests he has there.

Mr. and Mrs. F. H. Harrell, who operate the Rosemary Gardens, at 1600 East Tenth street, Topeka, Kan., are developing an attractive nursery sales ground and display yard near by at East Tenth and Lafayette place. Ideally located on a highway near the entrance to a large cemetery, the building proper will house a conservatory and a room for pottery display, besides a combined reception room and office. The grounds will include a formal sunken garden in the front and parking space off the street. Roses, evergreens and bedding plants will be featured.

Robert Mann, who has a greenhouse at Twenty-first and Gage streets, Topeka, Kan., has opened a flower shop and nursery sales yard at 709 Fillmore street, Topeka.

Lyle Hanes, formerly of the Tilford Floral Co., Osawatomie, Kan., since February 2 has been in charge of the greenhouse and propagation department of the Willis Nursery Co., Ottawa, Kan.

NEW ROSES PATENTED.

Plant patents recently issued by the United States patent office, according to Rummler, Rummler & Woodworth, Chicago patent lawyers, were as follows:

No. 200. Rose. Luther Burbank, deceased, late of Santa Rosa, Cal., by Elizabeth Waters Burbank, executrix, Santa Rosa, Cal., assignor to Stark Bros. Nurseries & Orchards Co., Louisiana, Mo. A new and distinct variety of hybrid tea rose plant characterized as to novelty by the bush or dwarf form, its strength, hardiness and resistance to heat and drought, its ever-blooming habit and the profuseness of flowers compared with hybrids of similar color.

No. 270. Rose. Gerrit de Buyter, Hasserswende, The Netherlands, assignor to Jackson & Perkins Co., Newark, N. Y. A new and distinct variety of polyantha rose plant characterized by the distinctiveness, uniformity and permanence of the color of its bloom, and the improved compactness and attractive form of the plant, rendering it equally adaptable for garden use or forcing in pot.

PIRONE TO NEW JERSEY.

P. P. Pirone has left Cornell University to take the place of Dr. Richard P. White as plant pathologist at the New Jersey agricultural experiment station, New Brunswick. He attended the meeting of the New Jersey Association of Nurserymen last month, after a visit to New Brunswick to find a home to which to move his wife and two children from Ithaca, N. Y.

THE Stanislaus Desert Gardens, Oakland, Cal., have moved their nursery and cactus stock to 8905 Foothill boulevard.

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STABELIN'S NURSERY Bridgman Mich.

RASPBERRIES

1-yr. No. 1
Per 1000

Taylor (Red) \$25.00
Indian Summer (Red) 35.00
Sodus (Purple tips) 25.00

Per 100
Marion (Purple tips) \$5.00
2-year and other grades

Special prices on large quantities. Let us quote you on your future needs.

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Baroda, Mich.

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Gooseberries, Blackberries
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Lining-out Stock
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Fruit Trees and Scions

The New Quetta Nectarine, very hardy and of superb quality, 3 to 4-ft. trees, 36c; 2 to 3-ft., 26c.

Pear Trees, heavy 1-in. up, Kleffer and Duchesne, 35c.

One-year Apple, all leading varieties, 3 ft. up, 25c.

Apple Scions

From high-producing bearing trees.

Yellow Delicious, Solid Red Delicious, Turkey, \$1.50 per 1000 grafts.

Delicious, Stayman, Jonathan, Grimes, Winesap, Black Twig, Northern Spy, \$3.50 per 1000. Liberal count.

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STRAWBERRIES

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GRAPEVINE SPECIALISTS

We also propagate Currants and Gooseberries. Our experience in growing these items since 1890 enables us to supply our customers with quality stock.

We invite your inquiries.

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Fredonia, N. Y.

OBITUARY.

P. J. A. Berckmans.

Funeral services for Prosper Jules Alphonse Berckmans, 71 years of age, horticulturist of Augusta, Ga., were held February 2 at his home. Mr. Berckmans died January 31. He had been ill for a week, but his condition was not considered serious until shortly before his death.

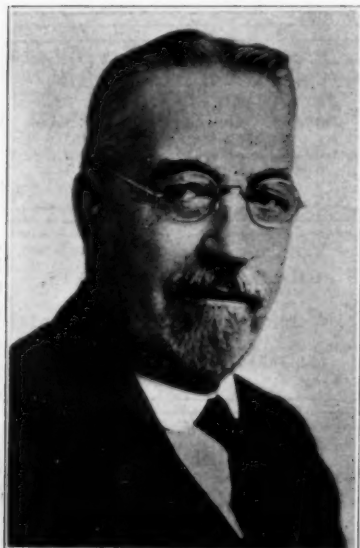
Born at Augusta, Mr. Berckmans received his education in the south. After he was graduated from the University of Georgia, he became associated with the old P. A. Berckmans Co., Augusta, one of the best known horticultural firms in the south. Then he and his brother, L. A. Berckmans, established the Berckmans Bros. Orchards, Mayfield, Ga., specializing in peach growing. In 1929 they sold the orchards and became associated with the Linville Improvement Co., Linville, N. C., which organized the Linville Nurseries, Inc. Later Mr. Berckmans and his brother founded the firm of L. A. & P. J. A. Berckmans, Augusta, in which Mr. Berckmans was active until taken ill.

Mr. Berckmans was best known in Augusta for his work on the grounds of the Augusta National Country Club, the site of which had been acquired by the Berckmans family in 1856; part of the property was transferred to the club when it was organized in 1931. As club manager, Mr. Berckmans made the care of the grounds his particular hobby, planned each hole of the golf course individually and planted thousands of flowers and shrubs. He also landscaped the Julian Smith park, now under construction at Augusta.

Surviving him are his widow, Mrs. Sallie Bedle Berckmans, and two brothers, L. A. Berckmans, Augusta, and Robert C. Berckmans, Macon. Burial was at the Summerville cemetery.

Charles Malmo.

Charles Malmo, 76 years old, pioneer nurseryman of the Pacific northwest and president of the Pacific Coast Association of Nurserymen, died suddenly Feb-



Charles Malmo.

ruary 9 of a heart attack at his home at Seattle, Wash. He was buried at Washelli Park, February 11. With his son, Clark Prescott Malmo, he operated the Charles Malmo Nursery at Fourth avenue and Denny way, Seattle.

Mr. Malmo was born in Norway. He came to the United States in 1878. In 1881 he entered the employ of the United States fisheries commission at Washington, D. C., and in 1883 he moved to St. Paul, Minn. He went to Seattle in 1891 and two years later started in business for himself. At that time, little or no nursery stock was grown on the Pacific coast with the exception of some fruit trees, and all ornamental stock was imported from Europe and sold on arrival. Because of the long transportation required, keeping stock out of the ground too long, this was not satisfactory to the customers. Mr. Malmo decided to make larger importations and grow the plants two years before selling them. The result was excellent, and it was easy to guarantee plants to grow and to obtain a price that made this procedure profitable. Later he propagated his own stock, finding the climate there favorable. In 1906 he founded the Seattle Rendering Works, remaining as its president until 1912. He was also head of the Edmond Electric Light Co. from 1910 to 1912.

Mr. Malmo is survived by a daughter, Mrs. Eunice C. Johnson, Bellingham, Wash., and two sons, Clarence O., president of the Eagle Logging Co., Seattle, and Clark Prescott Malmo. Other survivors are a sister, Mrs. R. Ness, Edgcomb, Wash., and a brother, Bert Malmo, Backus, Minn.

J. E. E.

V. C. Kryda.

V. C. Kryda, proprietor of the Lake-side Nursery, Sawyer and Three Oaks, Mich., died February 7. He was stricken in Florida and was rushed to Chicago, where he died. He was 77 years old.

Mr. Kryda was born in Czechoslovakia, coming to America when he was 12. After residing in Chicago for many years, he moved to Berrien county, Mich., twenty-two years ago.

Funeral services were held at the Congregational church, Three Oaks, Mich. Mr. Kryda was a member of the Three Oaks Masonic lodge, and Masonic rites were conducted at the grave. Besides his widow, a son and two daughters survive him.

PATENT DISPLAY CASE.

Patent 2,106,487 was issued January 25, 1938, to Carl C. Lumry, Shenandoah, Ia., assignor to Mount Arbor Nurseries, on a display case, or retail sale plant container. It is described as follows:

"A plant container comprising a substantially rectangular box, a cover telescopically mounted on said box and extending above the walls thereof to provide plant growth space, a marginal knock-out panel forming the top edge of the front wall of said box and extending below the telescoping part of

AMERICAN NURSERYMAN

said cover and enabling display of the contents of said box when removed, said cover above said box having a substantially flat imperforate top portion and perforated sloping sides."

SINCE selling its downtown headquarters, the Northern Nursery Co., Denver, Colo., is concentrating its operations at the nursery, ten miles north of the city. All offices are now located there.

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Cherry Laurel Seed, fresh crop, 25c per lb.
Ivan L. Butler Nursery, Forest Hill, La.

300 kinds of Native Plants, write
A. J. Greene, Box 62, Pineola, N. C.

Peonies: Tree and Herbaceous, best varieties.
Oberlin Peony Gardens, Sinking Springs, Pa.

Pinus Resinosa seed, new crop, high germination and purity, at lower prices.
K. J. Braden, Gray, Me.

Osage Orange Hedge Seed (Maclura, or Bois d'Arc, grown in northern Kansas. Get your orders in now. Rex Wickliffe, Seneca, Kan.

Tree Seeds, 2000 lbs.; also plants, nursery stock, 100,000 cuttings
Schroeder Nursery Co., Granite City, Ill.

Evergreens. Rhododendron Maximum, Mount Laurel, Canadian Hemlock, Azalea, Flowering Dogwood and Red Cedar. Seedlings specially priced. Write for wholesale price list. Appalachian Evergreen Co., Doeville, Tenn.

Azalea Liners.

We will have approximately fifty thousand Azalea liners for February-March delivery. Place your order now.

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Lining-out Stock.
Coniferous Evergreens.

	100	1000
Biota Aurea Nana Globosa		
Rooted cuttings	\$10.00	\$80.00
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Biota Bakeri		
Rooted cuttings, 4 to 6 ins.	6.00	50.00
2 1/4-in. pots	12.00	100.00
Biota Bonita		
Rooted cuttings, 4 to 6 ins.	8.00	60.00
2 1/4-in. pots	12.00	100.00
Biota Excelsa		
Rooted cuttings, 4 to 6 ins.	8.00	60.00
2 1/4-in. pots	12.00	100.00
Cypress, Italian, Worthiana		
Rooted cuttings, 4 to 6 ins.	6.00	50.00
2 1/4-in. pots	10.00	80.00
Juniperus Pfitzeriana		
Strong rooted cuttings	8.00	60.00
2 1/4-in. pots	12.00	100.00
Juniperus Sabina		
Rooted cuttings	8.00	60.00
2 1/4-in. pots	10.00	80.00
4 to 6 ins., transplanted	10.00	80.00
Juniperus Columnaris		
2 1/4-in. pots	20.00	
Juniperus Excelsa Stricta		
Rooted cuttings	8.00	60.00
2 1/4-in. pots	12.00	100.00
Juniperus Sylvestris		
Rooted cuttings	8.00	60.00
2 1/4-in. pots	12.00	100.00
Broad-leaved Evergreens.		
Abelia Grandiflora		
2 1/4-in. pots	8.00	70.00
Evonymus Japonicus		
Rooted cuttings	4.00	30.00
Jasminum Floridum (Humile)		
Rooted cuttings	5.00	40.00
2 1/4-in. pots	8.00	60.00
Lantana, hardy orange, hardy pink and Gloriosa		
2-in. pots	6.00	50.00
Leucophyllum Texanum		
2-in. pots	10.00	80.00
Pyracantha		
2 1/4-in. pots	10.00	80.00
Teucrium Chamaedrys		
2-in. pots	8.00	60.00
Buddleia de France		
2-in. pots	6.00	50.00
Ligustrum Lucidum, wax		
2 1/4-in. pots	10.00	80.00

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cut flowers—rosebushes—shrubs—perennials—for store and individual trade or retail mail orders—small fruits—counted seedlings—young plants—and so forth.

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CATALOGUES RECEIVED.

[In writing for a copy of any of the catalogues reviewed below, please mention that you saw it described in *The American Nurseryman*.]

Arapahoe Acres Nursery, Littleton, Colo.—The shrubs presented in this little catalogue are divided into tall, medium and low. Also offered are deciduous and evergreen trees, plus vines. Lists of plants to fit particular locations or for specific purposes are given.

Isaac Langley Williams, Exeter, N. H.—A red-covered booklet of sixteen pages comprises the new trade list of native plants. Included are ferns, orchids, bog plants, bulbous subjects, ground covers, vines, evergreens, trees and shrubs.

Earl Ferris Nursery, Hampton, Ia.—A multiplicity of illustrations, including many in full color, distinguishes the Earl Ferris "Planting Guide," of forty large pages. The offerings embrace a great variety of nursery material and annual and perennial flowers.

Lamb Nurseries, Spokane, Wash.—Within covers beautifully illustrated in colors are thirty-eight pages listing flower seeds and perennial and alpine plants. A few shrubs, vines and coniferous evergreens are also offered.

Call's Nurseries, Perry, O.—Roses and fruit stock are included in a liberally illustrated catalogue listing all manner of nursery material. The covers, in color, show roses and various fruits.

Rex D. Pearce, Merchantville, N. J.—Seeds of rare plants are offered in this catalogue of sixty-six pages. After a collection of fourteen varieties, appears the general seed list, which is alphabetical, commencing with abies and progressing through sinias. A separate list presents bulbs for spring planting. The booklet is illustrated with drawings.

Conard-Pyle Co., West Grove, Pa.—A fine illustrated catalogue of Star roses is inclosed within a stiff paper cover on which are printed instructions for wholesale selling. The catalogue itself is the one distributed among home gardeners.

Jewell Nursery Co., Lake City, Minn.—Large mimeographed pages list various nursery materials, including fruit stock. Also offered are plants of gypsophila, bleeding heart and other perennials.

Felix Gillet Nursery, Nevada City, Cal.—Roses, nuts, shrubs, flowering trees and evergreens are included in a 16-page catalogue of nursery stock. Chestnut trees are stressed for shade. Some perennials are offered.

A. M. Leonard & Son, Piqua, O.—Ninety-six pages, generously illustrated, are contained in the new handbook of nursery and garden tools. The booklet is punched for the insertion of a string from which to hang up the book for easy use. The tools embrace every variety needed by nurseryman or florist.

American Florist Supply Co., Chicago, Ill.—On pages of magazine size are printed innumerable pictures of the material listed in this catalogue of florists' and nurserymen's supplies. Baskets, design frames, ribbons and metallines, pot covers and florists' tools are but a few of the miscellany offered. Included in the material for growers is stuff for cloth houses, plus mowers and tillers. There are offers on plant foods and insecticides and numerous kinds of sprayers.

Howard M. Gillett, New Lebanon, N. Y.—Notes on the culture of gladioli are included in this booklet, which, besides gladioli, lists dahlias, peonies, irises, phloxes, outdoor lilies and a few perennials.

R. M. Kellogg Co., Three Rivers, Mich.—Many pictures, both in color and in black and white, illustrate a great deal of the stock offered in "Kellogg's Garden Beauty Book." Besides perennials, a great deal of nursery material, including roses, is presented.

Smith's Gardens & Nursery, Clarkston, Wash.—A mimeographed sheet entitled "Grab Bag Specials" is a miscellany of garden material, including annuals, perennials and nursery stock. A second sheet offers shrubs and fruit and nut trees.

N. A. Hallauer, Webster, N. Y.—A pocket-size catalogue of twenty-four pages contains offers of hardy perennials, which include alpine stock. Some nursery material is listed, as well as dahlias, peonies and irises.

D. & C. Hardy Plant Nursery, Westminster, Md.—A folder comprises a surplus list of perennials, with alpines. A pocket-size catalogue, containing forty-eight pages, with space for memorandums, offers a general list of alpine and perennial plants. The enumeration is alphabetical, extending from acena through yucca. There is a page of garden lilies.

Las Positas Nursery, Santa Barbara, Cal.—Charming black and white illustrations of flower arrangements feature the booklet which is the fifth annual dealers' bulb catalogue of this firm. The list is alphabetical, starting with alstroemeria and ending with sephyranthes. The bulbs are of the more unusual flowers.

Ralph J. Rooney, Portland, Ore.—A folder combines wholesale and retail lists of gladioli given in alphabetical order. Also offered are lily bulbs and seeds.

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IF YOU TELL THEM ABOUT **Black Leaf 40**

And they'll thank you too—for telling them how a little "Black Leaf 40" sprayed on shrubbery and evergreens keeps dogs away. They just don't like the odor.

This friendly advice will be a real service to your customers by helping them to prevent unsightly stains. It's simple and economical. A mixture of 1½ teaspoonfuls of "Black Leaf 40" to 1 gallon of water (use no soap) sprayed on the lower branches does the job. Your customers will also find there are many other uses for "Black Leaf 40".

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Hauck Kerosene Flame-Gun—2000°F. controlled heat—quickly...easily...economically destroys weeds (seeds and all), brush, other objectionable growths. Keeps roadways, fences, irrigation ditches, orchards, etc., clean. Hundred and one uses. Inexpensive—Safe—Easy to use. Pays for itself in time and money saved. 10 day Free Trial. Write for Free literature and special introductory price.



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Landscape man desires position in an eastern nursery in connection with sales yard or in laying out properties; Cornell graduate in landscaping; Protestant, married, aged 27. Capable of designing and laying out all types of plantings; thorough knowledge of plants, soils, lawns, insects and diseases; can handle help. Experienced in informal and naturalistic treatments; some farm experience and a general knowledge of pipe fitting, electric wiring and hardware. References. Address No. 86, c/o American Nurseryman, 508 S. Dearborn St., Chicago, Ill.

SITUATION WANTED

Experienced middle aged executive, fully acquainted with all work required for production, propagation, growing, catalogue selling, etc., of perennials and other plant material. Able to manage several departments. Wishes executive position, salary and future interest in department or firm. Address No. 85, c/o American Nurseryman, 508 S. Dearborn St., Chicago, Ill.

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Your men—and your business—can benefit from this professional home-study course.

Covers all problems of the nurseryman and landscape gardener—planting and plant materials, maintenance, SELLING LANDSCAPE SERVICE, mapping, planning, drafting, laying out parks, golf courses, subdivisions, cemeteries, etc.

Personal supervision of experienced, practicing landscape gardeners.

Let us show you how we can help your personnel do their work better, bring in more business! Write us today.

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This firm bought ten American Landscape School home-study courses to train their men in all branches of landscaping service. Resulting sales increase and clients' satisfaction proved value of investment.

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